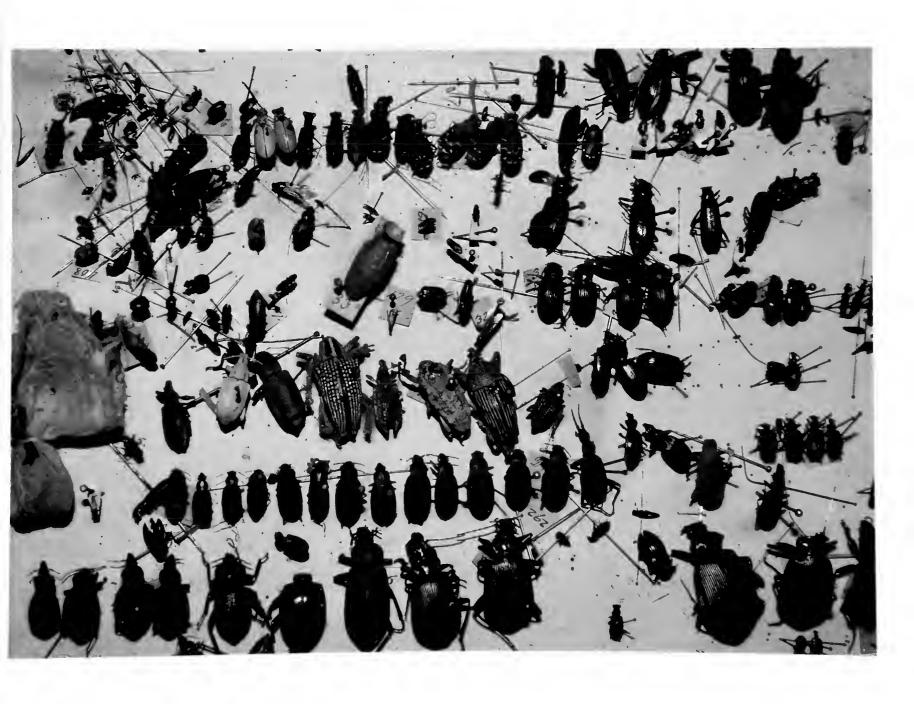
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An annotated inventory of the weevils (Coleoptera: Curculionoidea) described by Thomas Say

**JENS PRENA** 



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## AN ANNOTATED INVENTORY OF THE WEEVILS (COLEOPTERA: CURCULIONOIDEA) DESCRIBED BY THOMAS SAY

JENS PRENA1

ABSTRACT. A comprehensive search was conducted to ascertain the fate of the weevils named and described by the early North American naturalist Thomas Say. The historical context of each of his weevil papers is given along with the approximate date of publication. At least 117 extant type specimens were located for 92 (possibly 98) of his 132 nominal species in museum collections in Berlin, Cambridge, Halle, and Stockholm. Supporting evidence for their authenticity is presented. Actions are taken to stabilize eight genus group names. Species names are fixed when reasonably sound taxonomic revisions are available. Primary homonyms found are Baridius sulcipennis Brisont, 1870 (not Heyden, 1868), and Lixus marginatus Say, 1832 (not Beck, 1817). Lectotypes are designated for Balaninus nasicus Say, 1832; B. rostratus Gyllenhaal, 1835; Cleonus trivittatus Say, 1832; Cryptorliyuchus umbrosus Boheman, 1837; Liparus tessellatus Say, 1824; L. vittatus Sav, 1824; Rhynchaenus constrictus Say, 1824: Rhynchites aeratus Say, 1831; Rhynchopliorus immunis Sav, 1832; R. placidus Sav, 1832; R. venatus Say, 1832; and Tanymecus confusus Say, 1832. The holotype of *B. sulcipennis* Heyden is designated as neotype for Baridius transversus Say, 1832. Resurrected names are (formerly used names in square brackets) Curculio auctus Casev, 1910 [ante: C. nasiens anett.]; Pseudobaris erenata (Boheman, 1836) [ante: Craptus undatus auctt.]; Aramigus durius (Germar, 1823) [ante: A. tessellatus anett.]; Sphenophorus compressirostris Germar, 1823 [ante: S. germari Horn, 1873]; S. cultrirostris Gyllenhaal, 1838 [ante: S. compressirostris (Say, 1824)]; S. immunis (Say, 1832) and S. placidus (Say, 1832) [ante: S. venatus anett.]; Dorytomus rufus (Say, 1832) [ante: Ellescus ephippiatus (Say, 1832)]; Cryptorhynchus umbrosus Boheman, 1837 [ante: C. obliquus anett.]; and Tanymeeus confertus Gyllenhaal, 1834 [ante: T. confusus auctt.]. New or reestablished combinations are Aracanthus tessellatus (Sav. 1824) [from Aramigus Horn], Auleutes curtus (Say, 1832) [from Acanthoscelidius Hustache], Dorytomus rufus (Say, 1832) [from Ellescus Dejean], and Onychobavis undata (Sav. 1832) [from Craptus Casey]. New or reestablished junior

synonyms are Aramigus tessellatus pallidus Horn. 1876, Asynonychus santafecinus Lanteri, 1987, A. viridipallens Hinstache, 1947, Eurymetopus cherrolati Voß, 1934, E. griseus Voß, 1934, and Pantomorus biseriatus Hustache, 1947 [all of Aramigus durius (Germar, 1823)]; Baridius sulcipennis Heyden, 1868, B. sulcipennis Brisont, 1870, and B. stremus LeConte, 1869 [all of Baris transversa (Say, 1832)]; Balaninus nasicus Say, 1832 [of Curculio proboscideus Fabricius, 1775]; B. ordinatus Casev, 1910 [of Curculio auctus (Casey, 1910)]; Cryptorhynchus fuscatus LeConte, 1876 [of C. obliquus Say, 1832]; C. palmacollis Say, 1832 [of Rhyssomatus palmicollis (Say, 1832)]; Deracantlius pallidus Say, 1832 [of Aracanthus tessellatus (Sav. 1824)]; Dorytomus squamosus LeConte, 1876 [of D. rufus (Sav. 1832)]; Otidocephalus myrmecodes Chevrolat, 1833, and O. chevrolatii Horn, 1873 [of Myrmex myrmex (Herbst, 1797)]; Sphenophorus destructor Chittenden, 1906 [of S. venatus (Say, 1832)]; *S. parrulus* Gyllenhaal, 1838 [of *S. interstitialis* (Sav. 1832)]; S. sayi Gyllenhaal, 1838 [of S. immunis (Say, 1832)]; Tanymecus confusus Say, 1832 [of Hylobius pales (Herbst, 1797)]; and Tyloderma capitaloides Wibmer, 1981 [of T. aereum (Say, 1832)]. Tyloderma wibmeri new species is proposed for T. aereum anett.

Key words: Insects, Collections, Naturalists, New Harmony, North America

#### INTRODUCTION

The impetus for this study came approximately 10 years ago, when I noticed several misinterpreted and allegedly lost type specimens of North American weevils described by Thomas Say (1787–1834). The first specimens were encountered rather accidentally while resolving the original usage of a name that had been applied in the past to two similar but distinct species of *Odonto-corynus* Schönherr (Prena, 2008). A more methodical approach based on collection

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inventories and literature suggested that more syntypes may occur unrecognized in certain historical collections. Subsequent random searches in the natural history museums of Berlin and Stockholm not only revealed an unexpected plethora of what appeared to be syntypes, but the discovered specimens also threatened to undermine much of the very foundation of North American weevil taxonomy established by John LeConte and George Horn (e.g., Horn, 1873; LeConte and Horn, 1876). Through the intervening years, I searched for clues on how and when this material came to these and perhaps other collections and what had instigated the resulting taxonomic confusion.

The dissent between my initial results and the widely prevailing perception about the fate of Say's insects directed my attention more and more to the scientific correspondence among contemporary entomologists, whereas numerous secondary sources turned out to be marred by unsupported, sometimes entirely imaginative views. The latter not only applied to Say's own life and work, but also to the entomologists of the Melsheimer family with whom Say interacted. Details about Say's and the Melsheimers' work on beetles and the historical events that led to an exchange of their material can be found in Prena (2015). During the course of my studies, I came across more than 500 letters I consider pertinent for somebody wishing to study the beginning of entomology in North America. However, these probably represent only a minor fraction of what has been preserved in museum archives and libraries. Of these, I am using here only those that are relevant to Say's weevils. All other insects, including the slightly over 1000 remaining beetle names, are beyond the scope of this study. Say's carabid types (only those curated in Paris) were documented by Lindroth and Freitag (1969), and the labeled remnants of his personal insect collection at Harvard University were documented by Mawdsley (1993).

John L. LeConte made two statements that have influenced generations of entomologists. In the foreword of his compilation of Say's entomological papers (LeConte, 1859), he stated that all insects described by Say were destroyed. Without question, he was alluding to the boxes that Thaddeus Harris had returned to the Academy in 1842 (Elliot, 2008). It is unknown what exactly happened to them afterward. Ruschenberger (1852) reported about a newly established insect collection at this institution with modern, book-like drawers. However, the remarkable number of specimens still preserved today (Mawdsley, 1993) makes it unlikely that the bulk of Say's boxes was removed and discarded on a single occasion. When LeConte took residence in Philadelphia in 1852, it is curious why he should have been unable to gain access to, or at least accurate information about, Say's remaining insects while others succeeded even 50 years later (Mawdsley, 1993). A second, similarly misleading claim was made when LeConte (Ref. 25, see further below) unnecessarily inflated the scientific value of his own collection by stating that his specimens were compared with Say's. These two statements stand in conflict to each other and should be taken cautiously. I think it quite possible that the early rivalries at the Academy still reverberated in LeConte's perceptions. Say, a fourth-generation born American, passionately had argued against the description of North American species by European naturalists while others, still with strong and intimate connections to the scholarly communities in Europe, supplied them (rather than him) with specimens. However, Say himself described species from foreign countries, so that, retrospectively, his nationalism seems somewhat biased by a general grudge against others who did not accept him as the national authority on (and due recipient of) North American insects. It was in this context that Say reproached John Eatton LeConte, J. L. LeConte's father, of having donated his beetles to Dejcan (Ref. 16), and this old feud may well have curbed J. L. LeConte's interest in Say's insect collection, however battered it may have been.

The objective of this paper is to document the presently known extant weevil specimens used by Say in his descriptions and to confirm actual losses. If a particular genus has been revised, I update the current taxonomy and take necessary nomenclatural actions when deemed necessary. In all other cases, the catalog provides information about the currently known specimens available for study. Unlike Lindroth and Freitag (1969), I give strict preference to Say's original specimens and set aside subsequent neotype designations in accordance with ICZN Article 75.8. Reasons for doing so are the complexity of many taxonomic and nomenclatural problems that involve also other dispersed collections with North American beetles, like those of Dejean, Eschscholtz, Germar, Gundlach, and Olivier. Moreover, the type status of most specimens described by Say (1831b, 1832b,c) and forwarded to Schönherr is well documented and not contestable.

### MATERIALS AND METHODS

General Approach

Factors that impair the recognition of Say's type specimens are lag time between description and publication, absence of original labels, dispersal and integration in other collections, and indifference to the matter itself.

Considerable time frequently elapsed between the first usage of a manuscript name, the drafting of a description, and their formal publication, for the following reasons. First, Say used many manuscript names previously proposed by Knoch and Melsheimer (Melsheimer, 1806). All three

men distributed specimens under these names at different times, and often it remains uncertain on what the published description was based. Second, journal editors withheld one or more of Say's submissions in the years following his departure from Philadelphia. In a letter to Harris (Ref. 7), Say wrote: "I shall publish part of my Mss on Colcoptera as soon as they can be admitted into our Journal, they have been all ready this long time, but the press of matter excludes them." Third, Say himself withheld descriptions he had prepared and hoarded for his personal usage during the 1820s.

Using a common practice in those days, Say usually labeled only the first specimen of each species and provided rarely more than the taxonomic name. To my knowledge, his original identification labels are preserved only in the Harvard Collection. They represent different episodes of Say's entomological work and may be mixed with labels written by other persons. However, when Say mailed specimens to his correspondents, he attached numbers and listed the corresponding data in the accompanying letter. The recipient wrote new labels and integrated the specimens in his own collection. Schönherr almost always noted on the label and in his publications the previous owner and the collecting site; Germar and Harris often noted the initials on a small piece of paper. In numerous cases these labels were removed again by museum staff. I also noticed that Germar and Schönherr pinned several originally card-mounted specimens, and those may be unrecognizable when mixed with other material. Harris generally attached only minute labels with numbers and recorded the associated data in notebooks; I was unable to trace Say's weevil types with these resources. More confusion was added when Harris was in charge of Say's insect collection, forwarded specimens to previous recipients (e.g., Germar and Schönherr) along with material from other sources, replaced original labels, 326

and transferred specimens to his own collection.

The already taxing recognizability of Say's insects is exacerbated even further by their convoluted history of dispersal to, and integration in, other collections. Several collections of primary recipients (e.g., Dejean, Germar, Winthem) were divided and sold or donated in parts to other collectors (e.g., Candèze, Dohrn, Kraatz, Lüders, Oberthür, Roelofs, Sommer) before they came to museums or universities. Additionally, single specimens might have been donated or exchanged already by the first or any of the subsequent owners. Although the survival of some of Say's insects has been known for decades (Kuschel, 1952; Lindroth and Freitag, 1969; Smith, 1986; Mawdsley, 1993; F. C. Thompson, personal communication), there is no general overview about where the bulk of the material went. My original intention was to search also in other museum collections which are likely to house Say specimens. However, I eventually dismissed the plan because it involved several hundred beetles, a fair number of European museums, and the need to decipher substantially more historical correspondence. What became clear, though, is that many beetle types were lost or destroyed, indeed, although in a different way and much later than generally assumed, such as those sent to Gravenhorst and Winthem.

Notwithstanding the objective challenges mentioned above, not a few taxonomists and curators failed even when available resources readily linked existing museum material with Say. Reasons for this are manifold and often have to do with limited availability of original literature, insufficient familiarity with languages, historical failures of collection managers, and the prevailing low priority of museum collection management involving the detailed histories of acquired materials.

For all these reasons, I focused on those specimens that Say documented in his

correspondence starting around 1824 (when he began publishing weevil descriptions) and refrained from further random searches. Additionally, I tracked the specimens sent by Harris to Schönherr (among them Say material) because some subsequent type designations made from this material were flawed. The following abbreviations are used to refer to repositories and archives in the text:

ANSP Academy of Natural Sciences, Drexel University, Philadelphia, USA

MCZ Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA

MfN Museum für Naturkunde, Berlin, Germany

MLUH Institut für Zoologie, Martin-Luther Universität, Halle, Germany

NHRS Naturhistoriska riksmuseet, Stockholm, Sweden

SDEI Senckenberg, Deutsches Entomologisches Institut, Müncheberg, Germany

SUBH Staats- und Universitätsbibliothek, Hamburg, Germany

USNM Smithsonian, National Museum of Natural History, Washington, USA

WMI Working Men's Institute, New Harmony, Indiana, USA

I also studied photos of an old insect collection housed at WMI, which were taken and kindly made available to me by Roman Rakitov in 2011. One of the five boxes contains approximately 40 North American and a few foreign weevil specimens, some of them provided with numbers. Initially I saw no connection to Say but, with more documents at hand, had to rescind my view. The handwritten text on a few miscellaneous labels, the style and scientific nature of the notes contained in the lids of the boxes, and the overall species composition suggest that this material indeed belonged to Say, not Charles-Alexan-

dre Lesueur or some other resident of New Harmony. Regrettably, original identifications are lacking and one should be aware that the boxes probably contain also specimens of the Harris Collection received in March 1834. Nevertheless, these and Knoch's Melsheimer specimens might be of interest in future interpretations of still unrecognized species. The autographs and documents referred to in the text are as follows:

Ref. 1. Letter by Thomas Say, Philadelphia, to Johann Friedrich (aka John Frederick) Melsheimer, Hanover, dated 29 August 1821. In English. Brief account about the Rocky Mountain Expedition under Major Long, with a statement that the official repository of the collections would be Peale's museum in Philadelphia. Source: ANSP, Archives Collection 13 (also published by Fox, 1901).

Ref. 2. Letter by Ernst Friedrich Germar, Halle, to Wilhelm von Winthem, Hamburg, dated 8 October 1823. In German. Companion letter going with several separate boxes addressed to Langsdorff, Schönherr, Westermann, Wiedemann, and Winthem himself. Germar refers therein specifically to a copy of his recently published *Insecto*rum species novae as being included in Schönherr's lot (dated 5 October 1823) according to Schönherr's response letter from 28 February 1824, SDEI). Informs about death of Christian Hendel who had printed the book and that Schönherr has submitted a new weevil classification to Isis (which apparently had not appeared yet). Source: SUBH, Nachlässe und Autographen.

Ref. 3. Letter by Prince Maximilian of Wied, Neuwied, to Ernst Friedrich Germar, Halle, dated 10 November 1823. In German. Acknowledgment for having received a copy of *Insectorum species novae*. Source: SDEI.

Ref. 4. Letter by Comte Dejean, Paris, to Ernst Friedrich Germar, Halle, dated 19 November 1823. In French. Response to Germar's last letter and shipment from 1 October 1823 expressing gratitude for having received copies of *Insectorum species novae* and *Fauna europeae*, volumes 4–6 and 8. Source: SDEI.

Ref. 5. Letter by Thaddeus Harris, Milton, to Thomas Say, Philadelphia, dated 18 November 1824. In English. Announces that Mr. Fuller will convey two boxes with insects for identification; provides additional observations on some of them. Source: MCZ, Ernst Mayr Library (also published by Scudder, 1891).

Ref. 6. Letter by Thomas Say, Philadelphia, to Johann Friedrich (aka John Frederick) Melsheimer, Hanover, dated 1 December 1824. In English. Informs that American Entomology volume 1 is published. Source: ANSP, Archives Collection 13.

Ref. 7. Letter by Thomas Say, Philadelphia, to Thaddeus Harris, Milton, dated 8 January 1825. In English. Contains comments on specimens sent by Harris on 18 November 1824 (Ref. 5) and list with 176 identifications. Letter and box conveyed by Thomas Nuttall. Source: MCZ, Ernst Mayr Library.

Ref. 8. Thomas Say's retained copy of the list with identified species returned to Thaddeus Harris, Milton; undated (corresponds with Ref. 7). Source: ANSP, Archives Collection 455.

Ref. 9. Letter by Thomas Say, Philadelphia, to Thaddeus Harris, Milton, dated 21 November 1825. In English. Announcing his departure to New Harmony within the next few days and the recent submission of a manuscript on Coleoptera to the Journal of ANSP. Source: MCZ, Ernst Mayr Library, sfMu 1308.43.1.

Ref. 10. Thomas Say's retained copy of the list with the species mailed to Ernst Friedrich Germar in Halle, Germany. One double-sided sheet listing 143 Coleoptera (64 tagged as syntypes but many still being manuscript names) and 5 Lepidoptera. Dated December 1827, probably mailed in 328

early January 1828 when passing through New Orleans with William Maclure, on the way to Mexico. Source: ANSP, Archives Collection 455.

Ref. 11. Thomas Say's retained copy of the list with the species mailed to Wilhelm von Winthem in Hamburg, Germany. One double-sided sheet listing 125 Coleoptera. Dated December 1827, probably mailed in early January 1828 when passing with William Maclure through New Orleans on the way to Mexico. Apparently donated in return for a box with specimens sent by Winthem on 11 March 1825. Source: ANSP, Archives Collection 455.

Ref. 12. Thomas Say's retained copy of the list with Mexican plant material sent to Robert Carr at Bartram's Garden in Philadelphia on 23 July 1828. ANSP, Archives Collection 433.

Ref. 13. Letter by Frédéric Auguste Ismar, New Orleans, to William Maclure, Mexico City, dated 15 November 1829 (probably error for 15 December 1829). In French. Personal information about progress of his voyage to New Harmony. Source: WMI, New Harmony Collections, VAA4026-0231.

Ref. 14. Letter by William Bennett, Mexico City, to Marie Fretageot, New Harmony, dated 20 February 1830. In English. Provides details about his arrival in Mexico: left Veracruz for Mexico City on 20 January 1830, traveled via Orizaba and Puebla instead of Xalapa. Source: WMI, New Harmony Collections, VAA4026-0244.

Ref. 15. Thomas Say's retained copy of the list with the species sent to Carl Johann Schönherr in Skara, Sweden. One folded sheet with four pages (Prena, 2015, fig. 1), dated 1830, listing 125 species (mostly manuscript names) plus two unnamed species A and B, with cross references to the number of the corresponding name in Melsheimer (1806), annotations (including asterisks [\*], which probably denote singletons [originally unique or last remaining specimen of a former series]; some asterisks

are crossed out and symbolized herein as •), and the note, "to be returned in case there is no other sp. of that genus in the box." Taxa listed with an asterisk and described shortly afterward in the Curculionites pamphlet are considered herein as holotypes; those with an asterisk but described in the 1820s are considered as likely syntypes. Drafted before 18 March 1830 (Ref. 18), with subsequent additions and changes made in connection with Refs. 18 and 19. Source: ANSP, Archives Collection 455.

Ref. 16. Letter by Thomas Say, New Harmony, to Thaddeus Harris, Milton, dated 20 May 1830. In English. Reproaches John Eatton LeConte for being unable to describe the new species of his insect collection even with the help of Dejean and for having donated all his Coleoptera to the latter. Source: MCZ, Ernst Mayr Library, sfMu 1308.43.1.

Ref. 17. Companion letter and list going with two boxes of insects (ca. 140 species) sent by Thomas Say, New Harmony, to Friedrich Klug, Berlin, dated 10 December 1830. In English. Source: MfN, Historische Bild- und Schriftgutsammlungen.

Ref. 18. Letter by Carl Johann Schönherr, Skara, to Thomas Say, New Harmony, dated 23 April 1831. In Latin. Refers to Say's box with weevils mailed on 18 March 1830 (Ref. 15) which arrived damaged on 1 October 1830. Provides comments on the first 25 species on Say's list (fact mentioned in Ref. 19), but this part and the envelope apparently are lost. Source: MCZ, Ernst Mayr Library, BMs 31.20.19.

Ref. 19. Letter by Carl Johann Schönherr, Skara, to Thomas Say, New Harmony, dated 22 October 1831. In Latin. Response to Say's letter from 1 August 1831 (which was about Schönherr's shipment of 345 species and several books, all not arrived yet), with comments on species 26–127 of Say's earlier shipment (Ref. 15). Upon receipt, Say marked with a semicircle the comments of those species which he was about to include in the Curculionites pamphlet; in the same

fashion he marked the corresponding records (only between 73 and 103) on his retained list (Ref. 15; Prena, 2015, figs. 1,2). Source: MCZ, Ernst Mayr Library, bMs 31.20.19.

Ref. 20. Letter by Thomas Say, New Harmony, to Thaddeus Harris, Cambridge, dated 21 December 1831. In English. Encourages Harris to forward insects for identification. Informs about ongoing work on a paper containing his weevil descriptions and his intent to describe more in a supplement. Source: MCZ, Ernst Mayr Library, sfMu 1308.43.1.

Ref. 21. Letter by Thomas Say, New Harmony, to Thaddeus Harris, Cambridge, dated 8 September 1832. In English. Informs that Harris' shipment with Coleoptera has not arrived yet in New Orleans and that he is printing now a supplement of the Curculionites pamphlet. Source: MCZ, Ernst Mayr Library, sfMu 1308.43.1.

Ref. 22. Letter by Ernst Friedrich Germar, Halle, to Thomas Say, New Harmony, dated 10 June 1833. In German. Response to Say's letter from 26 December 1832. Acknowledges receipt of Curculionites pamphlet and mentions that he has several of the newly described species from Nicolas Hentz (obviously confusing shipments). Laments about having hassles with customs when shipments come though England or Holland; urges Say to mail via Winthem in Hamburg or Eggers & Franke in Bremen. Source: MCZ, Ernst Mayr Library, bMs 31.20.9.

Ref. 23. Letter by Thomas Say, New Harmony, to Thaddeus Harris, Cambridge, dated 7 August 1834. In English. With statement about unpublished descriptions and manuscript names. Source: MCZ, Ernst Mayr Library, sfMu 1308.43.1.

*Řef.* 24. Thaddeus Harris' draft and retained copy of the list with the species mailed to Carl Johann Schönherr in Skara, Sweden. Dated December 1836, with 42 Coleoptera species from his own and 77 from the Natural History Collection in

Boston. The first descriptions appear ca. 2.5 years later in Schönherr (1839). Source: MCZ, Ernst Mayr Library, bMu 1308.10.31.

Ref. 25. Letter by John Lawrence Le-Conte, Philadelphia, to Alexander Agassiz, Museum of Comparative Zoology, dated 28 April 1875. Offer to bequeath his personal collection of Coleoptera to the museum. Outlines its scientific value and gives recommendations on conservation and maintenance (e.g., restricted access to types and strict retention of original labels). Source: MCZ, Ernst Mayr Library (also published in Appendix B of the Annual Report of the Trustees of the Museum for 1875 and in The Coleopterists Bulletin 15(4): 1961).

#### Collecting Sites and Dates

Many of the weevils described by Say in the 1820s were collected during the early explorations of the interior parts of North America, which the United States had acquired from France in 1803 (the so-called Louisiana Purchase). The area initially was divided along the 33rd parallel into the Territory of Orleans to the south and the District of Louisiana to the north. The latter was redesignated as the Louisiana Territory in 1805 and renamed Missouri Territory in 1812 when the Orleans Territory and adjacent Spanish claims became the State of Louisiana. The southern part of the Missouri Territory became the Territory of Arkansaw in 1819. A relatively small part of the remaining Missouri Territory became the State of Missouri in 1821. Say used these historical expressions rather arbitrarily in abbreviated form and one should be aware that some meant different things at different times. This is important because Say also received specimens from other collectors, in particular the botanist Thomas Nuttall (1786–1859). Nuttall participated in the first stage of the Astor Expedition 1811 (during which he collected, for example, the type series of the Colorado potato beetle, Leptinotarsa decemlineata (Say), Chrysomelidae) and collected along the Arkansas and Red rivers in 1818-20, thereby being ahead of Say and Major Long's Rocky

Mountain Expedition.

Nuttall's locality "Missouri" applies to specimens collected in 1811 along the Missouri River, between present-day St. Louis, Missouri, and Mandan, North Dakota. Say's "Missouri" applies to specimens collected along the same river during June-July 1819 in today's State of Missouri but possibly also to collections made in the vicinity of present-day Topeka, Kansas. Only the collections from Engineer Cantonment, the 1819-20 winter camp on the Missouri near present-day Omaha, Nebraska, have precise locality data (Genoways and Ratcliffe, 2008). Nuttall's locality "Arkansa" applies to specimens collected in 1819 along the Arkansas River in present-day Arkansas (mostly around Ft. Smith) and eastern Oklahoma. Likewise, Say's "Arkansa" refers to the river of that name rather than to the historic Arkansaw Territory. His specimens from "Arkansa near the Rocky Mountains" were taken around July 1820 in today's Colorado, all other records from "Arkansa" may refer to collections made between August and early October further downstream in today's Kansas, Oklahoma, and Arkansas. Finally, collections along the Mississippi River were taken in October 1820 when sailing down from Cape Girardeau, Missouri, to New Orleans, Louisiana. The Louisiana specimens obtained from Joseph Barabino and Frédéric Auguste Ismar are from the New Orleans area, not the historic Louisiana Territory or subsequent State of Louisiana. The records from the Northwest Territory may refer to (i) the "Territory Northwest of the River Ohio," an organized incorporated territory of the United States that existed from 1787 to 1803, or (ii) the so-called North-Western Territory, a historical region northwest of Rupert's Land that existed until 1870. Because Say worked for a while as a curator

in the museum of Charles Willson Peale, he also had access to specimens of the Lewis and Clark Expedition (1804-06), but none are documented. I have not noticed any unlikely or obviously incorrect collecting data, although the data published by Schönherr (1833–45) disagree occasionally with Say's retained list, probably because of misinterpretations of dashes and ditto marks. Nevertheless, Say normally did not write locality data on labels and made several changes on his retained species list (Ref. 15), possibly based on field notes or from memory. Therefore, inaccuracies and errors may have occurred and cannot be ruled out.

Say described four weevils from Mexico, among them the first one ever described from there, without providing details on collecting localities or dates. It is relatively certain that these specimens came from his 1828 journey with William Maclure. Barber (1928) determined as Say's travel route the old road between Veracruz and Ciudad de México via Xalapa and Puebla. His conclusion is corroborated by the collecting localities of plants and seeds, which Say forwarded to Bartram's Garden (Ref. 12). Most of these items came from local markets or were collected in the vicinity of Ciudad de México (e.g., Tacubaya [spelled Tacubya], Chapultepec, Lago de Chalco, and the hills around the city). Say stayed in México from January to April 1828. William Bennett had been instructed to make further collections for Say, but his travel itinerary (Ref. 14) makes it unlikely that any of these specimens were sent to Schönherr. My preliminary results indicate that they were taken by Lesueur and forwarded to Chevrolat and Dupont.

#### Dates of Publication

Say sometimes typeset, printed, and distributed individual signatures of a particular work at different dates (Bousquet, 1993; Prena, 2015). For example, Say wrote to Klug (Ref. 17), "I send you, so far as it is printed, a paper that I am now occupied with on new North American insects, as far as page 41." Two aspects need to be considered in this context, i.e., date priority (which affects the validity of names and the fixation of type species) and occurrence of name variants in separately issued parts (which determines their availability). Two instances of nearly simultaneously published homonyms deserve special mention. There is compelling evidence (see under Calandra compressirostra in the text and Bousquet, 2016) that Germar's *Insectorum* species novae was published in 1823 rather than 1824, as stated on the title page, and therefore has date priority over the sections of a paper printed in the Journal of the Academy of Natural Sciences Philadelphia (3[2]) for which Say claimed authorship priority based on the date of the meeting at which the manuscript was presented. The other case is Odontopus, a genus name introduced by Say in the second signature of his Curculionites pamphlet before May 1832, by Silbermann in his Revue Entomologique in April 1833 (stated in description) and by Laporte in his Magasin de Zoologie around 1832–33 (read on 29 February 1832; provisional date of publication determined by Harris [1942] as 1833 and fixed in Direction 63 (10); ICZN, 1957).

#### **Authorships**

The Curculionites pamphlet (Say, 1831b, 1832b,c) contains 10 new genus group names. Say wrote in a footnote on the first page that some of them were contributed by Schönherr. Those appeared in the paper usually with "Schoenh. in litt." (in the first signature only with "Sch."), whereas Say's own names were marked with "Nob." or the context made it obvious that he himself was proposing the name. Additionally, "Ophryastes Germ." appeared on page 13 in combination with a brief diagnosis and two species names; Alonso-Zarazaga and

Lyal (1999) considered *Ophryastes* Say, 1831 (actually 1832b), an available name and junior homonym of *Ophryastes* Germar, 1829.

The genus group names contributed by Schönherr to the Curculionites pamphlet were Pterocolus (p. 5), Graphorhinus (p. 8), Callopistus (p. 9), Aphrastus (p. 9), Agraphus (p. 13), and Analcis (p. 29). Authors who recognized them as being made available in this work generally attributed them to Say. The authorship issue is regulated by ICZN (1999) Article 50.1.1 (or the respective article in previous editions) which stipulates that if some person other than an author of the work is alone responsible both for the name or act and for satisfying the criteria of availability other than actual publication, then that other person is the author of the name or act. Four of the six aforementioned genus group names were made available by indication, i.e., by usage in combination with an available species name (ICZN, 1999, Article 12.2.5). Because Say was responsible for the publication but Schönherr for the names and acts, it is justified to acknowledge Schönherr (in Say, 1831–32) as the author of Graphorhinus, Callopistus, Aphrastus, and Analcis, with the year of publication corrected from 1831 to 1832 for the latter three names (see Prena, 2015, and catalog section below for dates). Of these four, only *Graph*orhinus Schönherr, 1831 (not Schönherr, 1833a; not Schönherr, 1833b), and Aphrastus Schönherr, 1832 (not Schönherr, 1833a), are valid. Callopistus Schönherr, 1832, is a subjective junior synonym of Compsus Schönherr, 1823; and *Analcis* Schönherr, 1832 (not Wagler, 1830; not Schönherr, 1833a), is a subjective junior synonym of Tyloderma Say, 1832b. Say remains the author of the other two Schönherr genera because it was he who published the first descriptions: Pterocolus Say, 1831b (not Schönherr, 1833), and Agraphus Say, 1832b (not Schönherr, 1833; not Schönherr, 1834b). The four genuine genus group names proposed by Say himself in this work are (with the corrected dates) *Thecesternus* Say, 1831b; *Aracanthus* Say, 1832b; *Odontopus* Say, 1832b; and *Tyloderma* Say, 1832b.

#### Conventions and General Arrangement

Because of the nomenclatural significance of dates, the arrangement of the catalog section follows the temporal sequence of publishing rather than the formal titles of Say's papers. At the beginning of each of these sections, I provide the date of publication along with supporting evidence. A summary of the original names, with their present generic assignment and nomenclatural status, is given in Table 1. All information from Say's correspondence is cited verbatim, including crossed-out words and later additions. My interpretation of his symbols is given under Ref. 15; own comments are placed in square brackets. Page numbers are used in citations to refer to specific information in a particular reference.

Numerous authors spelled their names in different ways, often adjusted to the language of the respective publication. I standardize them here to their native spelling, i.e., Gyllenhaal (see Palmblad and Wieselgren, 1839: 313), Schönherr (see Palmblad and Wieselgren, 1847: 177), and Voß (as in cited references and his early publications).

## CONSPECTUS OF THE WEEVILS (CURCULIONOIDEA) DESCRIBED BY SAY

Descriptions of Coleopterous Insects
Collected in the Late Expedition to the
Rocky Mountains, Performed by Order of
Mr. Calhoun, Secretary of War, under the
Command of Major Long. (Continued.)
Journal of the Academy of Natural Sciences
Philadelphia, 3(2)[part]: 298–320.

Date of Publication. [31] March 1824 (Fox, 1913: viii).

Notes. In addition to his own expedition material, Say also included in the descriptions specimens of two collecting trips made by Nuttall to the same general region (Nuttall, 1821; Beidleman, 1956) as well as matching specimens from Pennsylvania and from the 1817–18 expedition to the sea shores of Georgia and Florida (Bennett, 2002). The official repository for the material collected by the Long Expedition was Charles Willson Peale's museum in Philadelphia (Ref. 1). Say apparently kept at least some specimens and probably everything received from Nuttall.

#### Cryptorhynchus oculatus Say, 1824a: 308

Modern Name. Lechriops oculatus (Say). Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description; interpreted as St. Louis, Missouri, by Sleeper (1963)].

Exchange of Specimens. Say sent Schönherr one specimen as "\*50 oculatus, n. J.A.N.S." (Ref. 15).

Interpretations. The name is being used in the sense of LeConte (in LeConte and Horn, 1876: 260). Schönherr (1838: 650, 1845: 231) was unfamiliar with *C. oculatus*, so I assume that species 50 did not arrive undamaged with the 1830 shipment.

Extant Types. In the Harris Collection (MCZ) is one specimen with the type number 26422, apparently from the Say Collection and labeled in Say's hand "Zygops/ oculatus? S." The question mark indicates that this is a tentative identification, probably made much later than 1824, so the specimen may not be a syntype.

## Cryptorhynchus operculatus Say, 1824a: 308

Modern Name. Cylindrocopturus operculatus (Say).

Origin of Specific Name. Proposed by Say.

*Type Locality*. Arkansa [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "\*42 operculatus, n. J.A.N.S." (Ref. 15).

Interpretations. Say (1824a) surmised in the description whether this is the Curculio quercus of Melsheimer (1806: 29). Later, Say (1832b: 21) applied the latter name to another species in the same modern genus. The current taxonomy of C. operculatus is that of LeConte (in LeConte and Horn, 1876: 261).

Extant Types. One specimen is in drawer 144 of the Schönherr Collection (NHRS), with the labels "C. operculatus/ Say./ Mississippi./ Say." and "28."

Notes. This is one of the three names that follow "39 retentus n. (Mississippi)" on Say's retained list (Ref. 15). It is not obvious that they have ditto marks standing for "Mississippi" but Schönherr gives this locality for all three species.

#### Falciger acephalus Say, 1824a: 309

Modern Name. Acanthoscelidius acephalus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States, with a variety from Pennsylvania [stated in description].

Exchange of Specimens. Say sent specimens to Harris as "104 Cryptorhynchus acephalus nob. Jour." (Refs. 7 and 8) and to Germar as "30 Falciger acephalus, nob. X" (Ref. 10). Harris forwarded to Schönherr one specimen with the information "85. Ceutorhynchus leprosus, Say, in litt. (Hentz 1024) Harris 1275? N. Car." (Ref. 24), which later was described as Coeliodes leprosus Boheman, 1844.

Interpretations. The name is being used in the sense of Dietz (1896: 397), who did not realize that Say had more than one taxon in the type series (nominal species and one variety). However, he speculated about the applicability of the name Coeliodes leprosus Boheman, 1844, to his A. acephalus var. tenebrosus Dietz, 1896, but could not see why Boheman had referred to Say in the description.

Extant Types. The Germar Collection has six specimens glued in pairs on small cards. Each card is pinned separately; none has a label. The series includes A. subulirostris (Gyllenhaal, 1837) and A. leprosus (Boheman, 1844). I was unable to find the syntypes sent to Harris in 1825 (Ref. 7) or any reference to them in Harris' notebooks. In the Harris Collection (MCZ) are two unidentified specimens (no. 1275) which, according to the notebooks, were identified by Schönherr as Coeliodes leprosus [agreeing with A. acephalus sensu Dietz (1896)].

Notes. A future revision of Acanthoscelidius Hustache, 1930, needs to designate a lectotype (or neotype if the specimens in the Germar Collection are rejected as syntypes) so that A. acephalus takes priority either over A. subulirostris (currently a synonym of A. curtus of authors, not Say) or A. leprosus. Say's manuscript name C. leprosus (=Coeliodes leprosus Boheman, 1844) probably applied to his Falciger acephalus "var. a" from Pennsylvania (Say, 1824a).

#### Falciger 4-spinosus Say, 1824a: 310

Modern Name. Perigaster cretura (Herbst, 1797).

Origin of Specific Name. Proposed by Say.

Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "■36 4-spinosa, n. J.A.N.S. the 2 outer spines somet[ime]s wanting" (Ref. 15), whereupon Schönherr replied, "36. 4-spinosa Say J.A.N.S. — Phytobius id<sup>™</sup>." (Ref. 19).

Interpretations. Say (1832b) treated F. quadrispinosus as a junior synonym of Ceutorhynchus cretura (Herbst, 1797). Gyllenhaal (in Schönherr, 1835: 463) refut-

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Table 1. Summary of the weevels described in Say (1824a-d, 1826, 1831b, 1832b, c), with currently valid names, nomenclatural status, and comments (EN, emended name; LT, lectotype; NT, neotype; ST, syntypes).

Paper	Original Name	Curreut Name	Status <sup>1</sup>	Comment
1824a	Cryptorhynchus oculatus	Lechriops oculatus	valid	
	Cryptorliynchus operculatus	Cylindrocopturus operculatus	valid	
	Falciger acephalus	Acanthoscelidius acephalus	valid	
	Falciger quadrispinosus	Perigaster evetura	syn.	
	Curculio acutus	Bvachystylus sayi	hom.	ST not found
	Curculio auricephalus	Compsus auricephalus	valid	or noctound
	Rhynchaenus caudatus	Listronotus caudatus	valid	
	Rhynchaenus armicollis	Magdalis armicollis	valid	
	Rhynchaenus linealicollis	Rhyssomatus lineaticollis	valid valid	ENI
	Rhynchaenus constrictus	Smicronyx constrictus	valid valid	EN
	Rhynchaenus interstitialis	Baris interstitialis		LT, NT set aside
	Rhynchaenus undulatus	Madarellus undulatus	valid	
	Liparus vittatus	Oplirijastės vittatus	valid	T. CO. N. Co.
	Liparus sulcirostris		valid	LT, NT set aside
	Liparus imbricatus	Ophryastes sulcirostris	valid	NT contestable
	Liparus tessellatus	Epicaerus imbricatus	valid	*
	Calaudra compressirostra	Aracantlus tessellatus	yalid	LT
1824b	Hylesinus aculeatus	Sphenophorus cultrirostris	hom.	EN, NT set aside
	Scolytus quadrispinosus	Hylesinus aculeatus	valid	
	Scolytus nuticus	Scolytus quadrispinosus	valid	ST not found
		Scolytus muticus	valid	ST not found
1824c	Platypus compositus	Euplatypus compositus	valid	ST not found
1824d	Rhynchites rubricollis	Eugnamptus angustatus	syn.	ST not found
182 <del>4</del> 0	Calandra quinquepunctata	Rhodobaenus quinquepunctatus	valid	
1020	Anthribus notatus	Euparius lugubris	syn.	ST not found
	Anthribus capillicornis	Piesocorynus moestus	syn.	ST not found
	Anthribus quadrinotatus	Goniocloeus bimaculatus	SVn.	ST not found
	Anthribus limbatus	Trigonorhinus limbatus	valid	ST not found
	Anthribus alternatus	Trigonorhinus alternatus	valid	ST not found
	Anthribus variegatus	Trigonorhinus sticticus	hom.	
	Anthribus tomentosus	Trigonorhinus tomentosus	valid	ST not found
	Attelabus pubescens	Himatolabus pubescens	valid	NT
	Attelabus scutellaris	Piazorhinus scutellaris	valid	
	Apion rostrum	Trichapion rostrum	valid	NT contestable
	Brachycerus humeralis	Thecesternus humeralis	valid	111 Contestant
	Bostrichus exesus	Ips calligraphus	syn.	ST not found
	Bostrichus fasciatus	Monarthrum fasciatum	valid	ST not found
	Bostrichus xylographus	Xyleborus xylographus	valid	NT
	Bostrichus politus	Xyloterinus politus	valid	ST not found
	Bostrichus pini	Ips pini	valid	21 HOC TOURIG
	Hylurgus dentatus	Phlocosinus dentatus	valid	err and for 1
831b	Anthribus cornutus	Toxonotus cornutus	valid	ST not found
	Anthribus brevicornis	Phaenithon brevicorne		ST not found
	Rhynchites aeratus	Temnocerus aeratus	valid	ST not found
	Apion segnipes	Sayapion segnipes	valid	LT, NT set aside
	Thanwophilus barbitus		valid	NT
	Thannophilus pandura	Magdalis barbitus Magdalia waydona	valid	
	Thannophilus pallidus	Magdalis pandura	valid	
	Gvaphorhinus vadosus	Magdalis armicollis	syn.	
32b		Graphorhinus vadosus	valid	
5:5 <b>2</b> D	Graphorhinus operculatus	Epicaerus operculatus	valid	
	Deracanthus pallidus	Avacauthus tessellatus	syn.	
	Thylacites microps	Miuyomerus microps	valid	
	Tanymecus lacaena	Tanymecus confertus	hom.	
	Tanymecus confusus	Hylobius pales	svn.	LT
	Aplwastus taeniatus	Aphrastus taeniatus	valid	
	Sitona indifferens	Sitona lincellus	svn.	
	Sitona scissifrous	Sitoua lineellus	syn.	NT set aside

Table 1. Continued.

		Table 1. Continued.		
Paper	Original Name	Current Name	Status <sup>1</sup>	Comment
	Cleonus trivittatus	Scaphomorphus trivittatus	valid	LT, NT set aside
	Hypsonotus alternatus	Trichalophus altevnatus	valid	NT set aside
	Listrodeves squamiger	Listronotus squamiger	valid	NT set aside
	Listvodeves porcellus	Listronotus porcellus	valid	
	Listvoderes sparsus	Listronotus spavsus	valid	
	Listrodeves lineatulus	Listrouotus spavsus	SVIL	
	Barynotus vigidus	Phyxelis rigidus	valid	
	Barynotus crinaccus	Panscopus erinaceus	valid	LΤ
	Barynotus granulatus	Anametis gvanulata	valid	
	Lepyrus geminatus	Lepyrus palustris	SV11.	ST not found
	Phytonomus trivittatus	Hypera trivittata	valid	ST not found
	Phytonomus comptus	Hypera rumicis	svn.	
	Peritelus chrysorrhaeus	Cercopeus chrysorrhoeus	valid	EN, NT set aside
	Peritelus bellicus	Agraphus bellicus	valid	
	Lixus marginatus	Lixus sp.	hom.	
	Lixus concavus	Lixus concavus	valid	
	Lixus latevalis	Lixus scrobicollis	hom.	
	Lixus musculus	Lixus musculus	valid	
	Erirhinus mucidus	Dorytomus mucidus	valid	
	Authonomus quadrigibbus	Antȟonomus quadrigibhus	valid	NT set aside
	Anthonomus musculus	Authonomus musculus	valid	
	Anthonomus calceatus	Odontopus calceatus	valid	
	Erodiscus nyrmecodes	Myrmex myrmex	syn.	
	Balaninus nasicus	Curculio proboscideus	SVII.	LT, NT set aside
	Balaninus rectus	Curculio proboscideus	syn.	
	Balaninus nasutus	Curculio proboscideus	syn.	
	Tylomus lineaticollis palmicollis	Rhyssomatus palmicollis	valid	
	Örchestes ephippiatus	Tachyerges ephippiatus	valid	NΤ
	Orchestes pallicornis	Orchestes pallicornis	valid	NT contestable
	Baridius trinotatus	Trichobaris trinotata	valid	NT designation invalid
	Baridius undatus	Onychobaris undata	valid	O
	Bavidius striatus	Baris striata	valid	
	Baridius transversus	Bavis transversa	valid	NT
	Cryptorhynchus anaglypticus	Conotrachelus anaglypticus	valid	NT set aside
	Cryptochynchus elegans	Conotrachelus elegans	valid	NT contestable
	Cryptorhynchus foveolatus	Tyloderma foveolatum	valid	
	Cryptorhynchus bisignatus	Eubulus bisignatus	valid	NT
	Cryptorhynchus tubulatus	Idiostethus tubulatus	valid	ST not found
	Ceutorhynchus triangularis	Rhinoncus triangularis	valid	
	Ceutorhynchus inacqualis	Craponius inaequalis	valid	ST not found
	Zygops quercus	Cylindrocopturus quercus	valid	
	Centrinus scutellumalbum	Õdontocorynus umbellae	svn.	
	Rhynchophorus praepotens	Scaphomorphus trivittatus	SVII.	
	Rhynchophorus interstitialis	Splienophovus interstitialis	valid	
	Rhipichophorus truncatus	Sphenophorus pertiuax	svn.	
	Rhynchophovus cicatricosus	Sphenophovus cariosus	SVII.	
	Rhynchophorus venatus	Sphenophovus venatus	valid	LT, NT set aside
	Rhynchophorus vectus	Sphenophorus rectus	valid	NT
	Rhyuchophorus immunis	Sphenophorus immunis	valid	LT
	Rhynchophorus placidus	Sphenophorus placidus	valid	LT
	Rhynchophorus inacqualis	Sphenophorus inacqualis	valid	NT set aside
	Cossonus corticola	Cossonus corticola	valid	· · · · · · · · · · · · · · · · · · ·
	Cossonus correcta Cossonus platalea	Cossonus platalea	valid	
	Dryophthorus corticalis	Dryophthorus americanus	liom.	
1093		Ellescus ephippiatus	valid	
1832c	Evirhinus ephippiatus	Dovytomus rufus	valid	EN
	Erirlinus rufous	Authonomus sutuvalis		LIV
	Anthonomus crythropterus	, uanonomas sucuruits	syn.	

Table 1. Continued.

Paper	Original Name	Current Name	Status <sup>1</sup>	Comment
	Anthonomus signatus	Anthonomus signatus	valid	
	Tycliius aratus	Tychius aratus	valid	NT set aside
	Tychius amoemis	Smicronyx amoenus	valid	NT set aside
	Baridius nigrinus	Pseudobaris nigrina	valid	
	Baridius scolopax	Rhoptobaris scolopax	valid	
	Baridius acutipennis	Pseudobaris acutipennis	valid	
	Cryptorhynchus retentus	Conotrachelus retentus	valid	NT set aside
	Cryptorlynchus palmacollis	Rhyssomatus palmicollis	SVn.	
	Cryptorhynchus cribricollis	Phelocoms cribricollis	valid	NT set aside
	Cryptorhynchus obliquus	Cryptorhynchus obliquus	valid	NT set aside
	Cryptorhynchus ferratus	Apteromeclius ferratus	valid	
	Bagous mamillatus	Bagous mamillatus	valid	NT set aside
	Bagous simplex	Lissorhoptrus simplex	valid	ST not found
	Bagons aerens	Tyloderma aereum	valid	NT set aside
	Tylodes clavatus	Acalles clavatus	valid	
	Čeutorhynchus curtus	Aulentes curtus	valid	
	Cleogoms sedentarins	Pseudomus sedentarius	valid	
	Cossonus multiforus	Cossoms multiforus	valid	ST not found
	Rhyncolus latinasus	Cossonus corticola	syn,	LT

<sup>&</sup>lt;sup>1</sup> syn., synonym; hom., homonym.

ed the synonymy based on the specimen received from Say and transferred the name to *Phytobius* Schönherr, 1833. When Dietz (1896: 479) described the genus *Perigaster* for *C. cretura* and *Coelogaster obscurus* LeConte, 1876, he maintained *F. quadrispinosus* in synonymy with *P. cretura*. Buchanan (1931: 322) formally accepted this synonymy but noted that Gyllenhaal's *F. quadrispinosus* was *Perigaster obscurus* (LeConte, 1876).

Extant Types. The specimen sent to Schönherr is in drawer 121 (NHRS). The collecting site on Schönherr's handwritten label, Mississippi, is neither mentioned in the description nor on Say's list. This could mean that the localities got confused [as with Baridius trinotatus, the preceding species on the list, possibly because of misinterpreted ditto marks] or that the specimen is not a syntype. Say's comment (Ref. 15) "the 2 outer spines sometimes wanting" suggests that, at least at the time of writing, more than one species was involved. It will be up to the next revising author to stabilize the names *P. cretura* and P. obscura.

#### Curculio acutus Say, 1824a: 310

Modern Name. Brachystylus sayi Alonso-Zarazaga, 1994.

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. Harris sent Schönherr one unidentified specimen from Alabama (probably item 57 or 58 in Ref. 24), which is mentioned in Schönherr (1845: 434).

Interpretations. The name is being used in the sense of Boheman (in Schönherr, 1845: 434). Harris' personal copy of Say (1831b) has a note that Schönherr identified this species initially as *Brachystylus harrisii* ms (see Scudder, 1899: 400).

Extant Types. None known.

Notes. Alonso-Zarazaga (1994) proposed Brachystylus sayi as a replacement name for C. acutus Say, 1824a (not Gmelin, 1790).

#### Curculio auricephalus Say, 1824a: 310

Modern Name. Compsus auricephalus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Mississippi river above Natchez (collected by Say) and probably Missouri (collected by Nuttall) [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "7 auricephalus, n. J.A.N.S. Mississippi opala Olivier?" (Ref. 15); it was cited under *Platyomus auricephalus* in Schönherr (1833b: 645) and again, as *P. auriceps*, in Schönherr (1840b: 183).

Interpretations. The name is being used in the sense of Horn (in LeConte and Horn, 1876: 88).

Extant Types. The specimen in drawer 177 of the Schönherr Collection (NHRS) is probably the syntype from near Natchez, Mississippi, collected by Say in November 1820. The second syntype mentioned in the description might be the unlabeled specimen in WMI.

## Rynchaenus [sic] caudatus Say, 1824a: 311

Modern Name. Listronotus caudatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri, near Engineer Cantonment on the Missouri river [stated in description].

Exchange of Specimens. Say sent Schönherr two specimens as "■32 caudatus, n. J.A.N.S. — (2) one of them mutillated (Mississippi) [later added:] Schon[herr] has chang[ed] it to rigidus, make it caudatulus S." (Ref. 15).

Interpretations. The name is being used in the sense of LeConte (in LeConte and Horn, 1876: 131) and Henderson (1939: 236).

Extant Types. Say (1824a) referred to several syntypes. The locality "Mississippi" on the two specimens sent to Schönherr (NHRS, drawer 191) disagrees with the

published type locality so they probably were not syntypes. Henderson (1939) designated a neotype from Douglas Co., Kansas.

## Rynchaenus [sic] armicollis Say, 1824a: 312

Modern Name. Magdalis armicollis (Say). Origin of Specific Name. Proposed by Say.

Type Locality. Banks of the Missouri (collected by Say) and Country of Missouri (collected by Nuttall) [stated in description].

Exchange of Specimens. Say sent specimens to at least three persons: to Germar as "25 Rynchaenus armicollis, nob. X" (Ref. 10), to Winthem as "97 Rynchaenus armicollis, nob." (Ref. 11), and to Schönherr as "33 armicollis, n. J.A.N.S." (Ref. 15).

Interpretations. The name is being used in the sense of Horn (1873: 456) and Blanchard (1887: 86).

Extant Types. Say (1824a) referred to several syntypes and one variety. The Germar Collection (MLUH, drawer 9/2/13) has one male and one female syntype with Say's initials on a green triangular label. The specimen sent to Schönherr (NHRS, drawer 114) lacks specific collecting data but may be a syntype as well.

## Rynchaenus [sic] linealicollis Say, 1824a: 313

Modern Name. Rhyssomatus lineaticollis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansa, near Rocky Mountains [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "26 Rynchaenus lineolicollis, nob. X" (Ref. 10).

Interpretations. The name is being used in the sense of Horn (1873: 464).

Extant Types. One syntype, with Say's original label "lineoli-/ collis/ TS./ Ark." (Prena, 2015, fig. 3), is in the MCZ Say

Collection (Mawdsley, 1993). One of the four specimens in the Germar Collection (MLUH, drawer 9/2/16) is on a short thick pin as used by Say, with a relatively new small red square underneath; this may be the syntype of the 1828 shipment.

Notes. The original spelling was "linealicollis," from Latin linealis (adjective derived from *linea*, meaning: of a line) and *collis*, a frequently used derivation from the Latin noun for neck. Subsequent spellings were lineolicollis (Ref. 10), lineaticollis (first time in Say, 1832b: 16), and lineatocollis (first time in Schönherr, 1845: 9). O'Brien and Wibmer (1982: 126) used in their checklist lineaticollis and considered the original spelling linealicollis as a lapsus. Although this does not hold etymologically, ICZN Article 33.3.1 sanctions the use of an incorrect subsequent spelling in case it prevails in the literature and has been referred to the publication containing the original spelling. I found in the literature one usage of linealicollis, three of lineatocollis, and approximately 30 of lineaticollis. Therefore, the subsequent spelling lineaticollis should be preserved and deemed to be the correct original spelling.

## Rynchaenus [sic] constrictus Say, 1824a: 313

Modern Name. Smicronyx constrictus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "\*76 constrictus, n. J.A.N.S." (Ref. 15), whereupon Schönherr replied, "76 constrictus Say. — Balaninus id"." (Ref. 19).

Interpretations. When LeConte (in LeConte and Horn, 1876: 167) described Desmoris, he included therein two species with the comment that each of them matches the descriptions of R. constrictus

given by Say (1824a) and Gyllenhaal (in Schönherr, 1835: 286). Anderson (1962: 328) studied representative series of males and females of the group and made type designations. He noted that authors had confused LeConte's two species with others and, specifically, had misused the name *R. constrictus* for *Smicronyx sordidus* LeConte, 1876.

Extant Types. The specimen sent to Schönherr is drawer 119 of the Schönherr Collection (NHRS), with the labels "Rhynch. con/ strictus Say/ Missuri. Say," "116/64," and D. Anderson's neotype label.

*Notes*. Anderson (1962) did not explain why he designated Say's specimen in the Schönherr Collection as the neotype for *R*. constrictus and disregarded it as a syntype. The collecting site of the specimen agrees with that given in the description, and Say collected only once along the Missouri river, i.e., during the Rocky Mountain Expedition in 1819. The entry on Say's list is marked with an asterisk and indicates that the mailed specimen was either the holotype or his last remaining syntype. Because the number of originally included specimens is unknown, I here designate the one received by Schönherr as the lectotype for R. constrictus and set aside the neotype designation by Anderson (1962) under Article 75.8.

## Rynchaenus [sic] interstitialis Say, 1824a: 314

Modern Name. Baris interstitialis (Say).
Origin of Specific Name. Proposed by Say, with reference to Curculio striatus in Melsheimer (1806: 29).

Type Locality. Missouri, Pennsylvania, and Florida [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "■73 interstitialis, n. J.A.N.S." (Ref. 15), whereupon Schönherr replied, "72. interstitialis. Say J.A.N.S. — Baridius id<sup>m</sup>." (Ref. 19). Harris sent Schönherr one specimen, probably as

"67. Baridius (Hentz 476) N. Car." (Ref. 24).

Interpretations. The early literature applied the name to three different species that occur at the localities mentioned in the description, i.e., a predominantly eastern species, which eventually may take the name because of prevailing usage; a species ranging from Central America to central North America, which presently is called *B*. strenua (LeConte, 1869) but will be renamed further below; and a southeastern species, with two other available and currently valid names. In his revision of the Californian species of Baris Germar, 1817, Gilbert (1964: 83) recognized B. interstitialis as a widespread, polymorphic complex of at least three different morphotypes that are not identical with the presumably three species in Say's type series. He apparently assumed that the holotype is from Missouri and housed in ANSP but it is not clear from his discussion on which specimens he had based the identities of *B. interstitialis* and the similarly confused B. transversa (Say, 1832b).

Extant Types. One syntype from Florida is in drawer 128 of the Schönherr Collection (NHRS). A fragment of another specimen without collecting data is in the Say Collection (MCZ).

*Notes*. Say (1824a) applied a new name to the Curculio striatus in Melsheimer (1806), probably because of the more senior R. striatus (Fabricius, 1801). Later Say (1832b: 18) acknowledged that he had misidentified Melsheimer's species, described it with the original specific name in Baridius, and gave a brief diagnosis of B. interstitialis. Neither this information nor the actions by Gilbert (1964) clarify the identity of B. interstitialis. The syntype in the Schönherr Collection is a Cirsium-associated species currently known as B. nitida (LeConte, 1876) and, in my opinion, not conspecific with B. interstitialis from Missouri and Pennsylvania. I could not identify the damaged specimen in the Say Collection (MCZ) morphologically.

Rynchaenus [sic] undulatus Say, 1824a: 315

Modern Name. Madarellus undulatus (Say).

Origin of Specific Name. Probably from Curculio undulatus; Melsheimer (in Melsheimer, 1806: 30).

Type Locality. Arkansa (collected by Nuttall), black variety from Pennsylvania [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "27 Rynchaenus undulatus, nob. X" (Ref. 10) and Schönherr one specimen as "34 undulatus, n. J.A.N.S." (Ref. 15).

*Interpretations*. Although the red pronotum makes at least the bicolored form of this species conspicuous in North America, there has been a long history of confusions with the slightly differently spelled *Baridius* undatus Say, 1832b, from Mexico. For example, the species "Craptus undulatus," once considered for the biological control of Hyptis suaveolens in Australia (Julien et al., 2012), is neither *Madarellus undulatus* (Say, 1824) nor *Onychobaris undata* (Say, 1832) but probably *Pseudobaris crenata* (Boheman, 1836). LeConte (1859) instigated these errors by making subtle, uncommented changes in Say's original texts, to which Champion (1909a), Casey (1922), and Hustache (1938) added further inaccuracies (see below under Baridius undatus Say, 1832b).

Extant Types. One of the two specimens in the Germar Collection (MLUH, drawer 9/2/21) is on a short thick pin and has a green triangular label with Say's initials. One Say specimen is in drawer 126 of the Schönherr Collection (NHRS) and two others in the Harris Collection (MCZ); none of them have locality data.

Liparus vittatus Say, 1824a: 316

Modern Name. Ophryastes vittatus (Say; not Hatch, 1971).

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Origin of Specific Name. Proposed by Say.

Type Locality. Arkansa, not uncommon in the arid 400–500 miles east of the Rocky Mountains [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "N°. 1 Liparus vittatus nob. X" (Ref. 10), which is mentioned in Schönherr (1833b: 509).

Interpretations. Liparus vittatus is the type species for Ophryastes Germar, 1829. A few entomologists studied this diverse and taxonomically difficult genus, of which rather little material was available in the old collections. The redescriptions of O. vittatus by LeConte (1853: 443) and Horn (in LeConte and Horn, 1876: 30) apparently were used in subsequent studies. Kissinger (1970: 50) distinguished O. vittatus from the very similar O. ovipennis Sharp, 1891, and recognized three color forms.

Extant Types. The Germar Collection (MLUH, drawer 9/2/4) has one remounted syntype with Say's initials on a green triangular label. A second remounted specimen without label may not be from Say. Kissinger (1970) designated a neotype from Marathon, Texas.

Notes. The Germar specimen with Say's initials must be regarded as an authentic syntype because of the short time lag between description and shipment. I here designate this specimen as the lectotype for Liparus vittatus Say, 1824, and, under Article 75.8, set aside the neotype of Kissinger (1970).

#### Liparus sulcirostris Say, 1824a: 316

Modern Name. Ophryastes sulcirostris (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansa, same districts as the preceding species [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "\*N°. 1 sulci-

rostris, nob. Journ. Acad. Nat. Sc. Arkansaw' (Ref. 15).

Interpretations. As with L. vittatus (see above), LeConte (1853: 443) and Horn (in LeConte and Horn, 1876: 31) influenced later entomologists with their identifications of L. sulcirostris. Davis (1947: 529) questioned the distinctness of O. sulcirostris and the Mexican O. porosus LeConte, 1856. Kissinger (1970: 36) designated a neotype that supported the prevailing taxonomy, thereby intentionally making O. ligatus LeConte, 1853, an objective synonym of O. sulcirostris.

Extant Types. The specimen sent to Schönherr is labeled "C. sulcirostris/ Say./ Am. bor. Say." and stands in drawer 170 (NHRS).

Notes. Schönherr (1833a: 508) based his type species for *Ophryastes* Germar on this specimen but Germar (1829: 358) had fixed already *L. vittatus* Say by indication (monotypy). If the next reviser of the group accepts Schönherr's specimen as a syntype, the neotype designation by Kissinger (1970) is to be set aside.

#### Liparus imbricatus Say, 1824a: 317

Modern Name. Epicaerus imbricatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansa, near Rocky Mountains, and on Missouri [stated in description].

Exchange of Specimens. Say sent Germar one specimen as "3 Liparus imbricatus nob. X" (Ref. 10), which is mentioned in Schönherr (1834a: 267).

Interpretations. The name is being used in the sense of Horn (in LeConte and Horn, 1876: 20), generally under the assumption that Say had a uniform series of just one common species.

Extant Types. One repaired and remounted specimen in the Germar Collection (MLUH, drawer 9/2/1) has a green

triangular label with Say's initials followed by an X.

#### Liparus tessellatus Say, 1824a: 318

Modern Name. Aracanthus tessellatus (Say), **new combination**.

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri, on the banks of the Mississippi and the lower part of the Missouri [stated in description].

Exchange of Specimens. Say sent Germar one specimen as "2 Liparus tesselatus nob. X" (Ref. 10); Germar confirmed its possession in Ref. 22, as Strophosoma tessellatus.

*Interpretations.* All transfers made before LeConte (in LeConte and Horn, 1876: 437) apparently were based on the study of type material: Say (1832b: 9) transferred the name from *Liparus* Olivier, 1807, to *Thyla*cites Germar, 1817 (subgenus Strophosoma Billberg, 1820); Germar in litt. (Taschenberg, 1869: 132) to Strophosoma; and Gemminger and Harold (1871: 2317) to Ophryastes Germar, 1829. Jekel (cited by LeConte and Horn, 1876: 94, in a footnote) misinterpreted the species as a member of Naupactini and subsequent authors transferred the name to Aramigus Horn, 1876; Pantomorus Schönherr, 1840; Asynonychus Crotch, 1867; and again to Aramigus (Horn in LeConte and Horn, 1876: 93; Pierce, 1913: 417; Buchanan, 1939: 22; Lanteri et al., 1987: 184; Lanteri and Díaz, 1994: 123).

Extant Types. The Germar Collection (MLUH, drawer 9/1/21) has a specimen with Say's initials on a triangular piece of green paper and the label "tessellatus/ Say/ Am. b./ Germ."

Notes. Except for a brief visit in November 1826, Say had no access to his collection between December 1825 and October 1827, when it arrived in New Harmony. Because the specimen was sent to Germar shortly afterward and agrees with the description (whereas Aramigus tessellatus of authors is a much larger species), it must

be regarded as a syntype. This specimen is fixed here as the lectotype for Liparus tessellatus Say. The designation of L. tessellatus as the type species for Aramigus by Pierce (1913: 416) is based on a misidentification. Sitona durius Germar, 1823, is resurrected here as the most senior name for L. tessellatus of authors (not Say), as Aramigus durius (Germar), and fixed as the type species for Aramigus Horn, 1876, under ICZN Article 70.3.1. This action stabilizes the genus name in the current sense used since Pierce (1913). Aracanthus tessellatus (Say) is the valid name for Deracanthus pallidus Say, 1832b (new synonym), but distinct from Aramigus pallidus Horn, 1876 (=A. durius) [erroneous synonymy by Kuschel in Wibmer and O'Brien (1986: 66) and, again, Lanteri and Díaz (1994: 123)].

#### Calandra compressirostra Say, 1824a: 319

Modern Name. Sphenophorus cultrirostris Gyllenhaal, 1838; **resurrected name**.

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansa, near the Rocky Mountains [stated in description]; on the banks of the Arkansaw river [Say, 1824d, signature I].

Exchange of Specimens. Say sent Schönherr one specimen with the information "\*56 compressirostris, n. J.A.N.S. 1823 [on next line:] Calandra comp<sup>s</sup>. Germar 1824" (Ref. 15).

Interpretations. Schönherr received from Say C. compressirostra under the name "compressirostris." Gyllenhaal (in Schönherr, 1838: 951) redescribed this specimen as Sphenophorus cultrirostris because of supposed homonymy with C. compressirostris Germar, "1824." Horn (1873: 429) and Vaurie (1951: 98) confirmed the synonymy of C. compressirostra Say and S. cultrirostris but failed to recognize that they are objective synonyms.

Extant Types. Say (1824d) used in the description the term "this singular species." He probably referred indeed to a single representative of the genus, not to a single individual, even though the asterisk in Ref. 15 suggests that only a singleton was left by 1830. One syntype is in drawer 45 of the Schönherr Collection, with Schönherr's label "C: compressi=/ rostris. Say./ Amer. bor. Say." Vaurie (1951) designated a neotype from Gatesville, Coryell County, Texas.

Notes. Say used the spelling "compressirostra" in two publications (Say, 1824a: 319, 474; Say, 1824d, signature H and index) but switched to "compressirostris" in Ref. 15 and Say (1832b: 23). Say's unexplained change of the name and his claim of nomenclatural priority over C. compressirostris Germar (Say, 1832b; Ref. 15) was accepted by subsequent revisers and catalogers (e.g., Horn, 1873: 429; Leng, 1920: 336; Csiki, 1936: 56; Vaurie, 1951: 97; O'Brien and Wibmer, 1982: 211) but both issues need scrutiny. The fascicle containing the description of C. compressirostra Say was published in March 1824 (Fox, 1913: viii), not 1823 as claimed by Say (1832b: 23). My study of Germar's correspondence revealed that Insectorum species novae was out by 1 October 1823 at the latest (Ref. 4). These letters also provide ample evidence that a few days later further copies were mailed to Langsdorff, Schönherr, Westermann, Wiedemann, and Winthem (Ref. 2). Among the first recipients was probably Prince Maximilian of Wied, to whom the book was dedicated. However, the associated letter no longer is in possession of the Wied family (G. Lehr, in litt.), and Maximilian did not mention the date of the shipment in his reply (Ref. 3). Therefore, the date of publication was between 10 September 1823 [date of foreword] and 1 October 1823 [earliest known reference to a mailed copy], slightly before the date determined by Bousquet (2016: 211). This gives C. compressirostris Germar, 1823

(**resurrected name**), date priority over *C*. compressirostra Say, 1824, and makes Sphenophorus germari Horn, 1873, an unnecessary replacement name of C. compressirostris Germar. The nomenclatural status of C. compressirostra Say and its subsequent spelling, now a junior homonym preoccupied by Germar (1823), need to be clarified as well. The homonymous name was an incorrect subsequent spelling (ICZN Article 33.3) until Vaurie (1951) cited both spellings and selected "compressirostris" as valid. Because there is no indication for an inadvertent misspelling of the original name (ICZN Article 32.5) and the subsequent spelling is a different adjectival derivation of rostrum (i.e., third declension) but not a mandatory change of the suffix, Vaurie's name could be deemed an unjustified emendation (ICZN Article 33.2.3). The originally used first declension was not uncommon in those days and occurs in numerous zoological and botanical names, such as Arachnothera longirostra (Latham, 1790); Loxia curvirostra Linné, 1758; Ostrea compressirostra Say, 1824; Sagittaria brevirostra Mackenzie and Bush, 1905; and Tripos longirostrus (Gourret) F. Gómez, 2013. However, because the incorrect subsequent spelling and the unjustified emendation have been in prevailing use since 1832 and have been attributed to the publication containing the original spelling, I retain "compressirostris" in accordance with ICZN Article 33.2.3.1 and 33.3.1. If nothing else, Say (1832b) himself undeniably was a proponent of this homonomy, although perhaps under somewhat different premises. Sphenophorus cultrirostris Gyllenhaal, 1838, replaces C. compressirostris Say, 1824, because the latter name is preoccupied by *C. compressirostris* Germar, 1823 (ICZN Article 23.5). I herewith set aside Vaurie's (1951) neotype designation for C. compressirostris Say in accordance with ICZN Article 75.8. Moreover, the holotype of C. compressirostris German is, by default, the holotype for S. germari

Horn, 1873, while the Texas specimen designated by Vaurie (1951) has no type status.

Descriptions of Coleopterous Insects
Collected in the Late Expedition to the
Rocky Mountains, Performed by Order of
Mr. Calhoun, Secretary of War, under the
Command of Major Long. (Continued.)
Journal of the Academy of Natural Sciences
Philadelphia, 3(2)[part]: 321–331.

Date of Publication. 5 April 1824 (Fox, 1913: viii).

#### Hylesinus aculeatus Say, 1824b: 322

Modern Name. Hylesinus aculeatus Say. Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "38 Hylesinus aculeatus nob. X" (Ref. 10).

Interpretations. LeConte (in Zimmermann, 1868: 148) questioned the distinctness of H. aculeatus and H. pruinosus Eichhoff, 1868, an issue that has remained unresolved (Schwarz, 1895: 607; Wood, 1982: 112). Gemminger and Harold (1872: 2673) considered *H. aculeatus* as the valid name for *Dendrosinus globosus* (Eichhoff, 1868). LeConte (in LeConte and Horn, 1876: 379/437) returned the name to Hylesinus Fabricius, 1801; however, he lumped H. aculeatus with another species, later described as Leperisinus oregonus Blackman, 1943 (Wood in Hatch, 1971: 407). The current taxonomy of *H. aculeatus* is that of Wood (1982), who assumed that the specimens standing under this name in the LeConte Collection (MCZ) were identified correctly.

Extant Types. One syntype came from the Germar Collection via Schaum to the MfN. It has Germar's green triangular label with Say's initials, Stein's printed catalog number 48434, Germar's handwritten label "aculeatus/ Say/ n. sp.," and the later identification "Leperisinus/ nahe oder/ californicus Sw./ K. E. Schedl." Two other specimens with the same catalog number also have Germar's labels, one with "nebulosus Dj.," the other with a green triangle as mentioned above but blank. All three specimens are remounted on blank size 0 pins typical for Germar. According to the catalog, the series originally included a fourth specimen from Baltimore.

#### Scolytus 4-spinosus Say, 1824b: 323

Modern Name. Scolytus quadrispinosus Say.

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. None known.

Interpretations. A handwritten note by E. F. Melsheimer in the family copy of Melsheimer (1806) proposes that this is Bostrichus scolytus [spelled scolitus] Fabricius, 1775. Say noted in his own copy that J. F. M[elsheimer] uses the name "juglandis" for B. scolytus. Wood (1982: 429) established the name in the currently used sense based on the description. Smith and Cognato (2014: 70) considered the original description as unambiguous with regard to the characteristics of this species.

Extant Types. None known.

#### Scolytus muticus Say, 1824b: 323

Modern Name. Scolytus muticus Say.
Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. None known.

Interpretations. Wood (1982: 426) identified the species based on the original description. Likewise, Smith and Cognato (2014: 66) considered the original description as unambiguous with regard to the characteristics of this species.

Extant Types. None known.

#### Platypus compositus Say, 1824b: 324

Modern Name. Euplatypus compositus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. None known.

Interpretations. Erichson (1836: 65) considered P. compositus as the female of P. parallelus (Fabricius, 1801). Chapuis (1865: 163) resurrected P. compositus and reported it from Mexico and Brazil. LeConte (in LeConte and Horn, 1876: 344) speculated that three of the North American species described by Chapuis (1865) as well as P. parallelus in Chapuis' sense are P. compositus; however, he considered P. parallelus (Fabricius) a nomen dubium. Wood and Bright (1992: 1126) corroborated these and four other synonyms of P. compositus. Kirkendall (2017: 110, personal communication) noted that the Neotropical records of Euplatypus compositus are misidentifications and usually apply to E. segnipes (Chapuis, 1865).

Extant Types. None known.

Class Insecta [pp. 268–378]. *In* W. H. Keating, *Narrative of an Expedition to the Source of St. Peter's River etc.* Vol. 2. Philadelphia: Carey and Lea.

Date of Publication. 29 November 1824 (stated on page [iv]). There is also an 1825 edition issued by Whittaker, London.

#### Rhynchites rubricollis Say, 1824c: 288

Modern Name. Eugnamptus angustatus (Herbst, 1797).

Origin of Specific Name. Rhynchites rubricollis; Melsheimer (in Melsheimer, 1806: 32).

Type Locality. Pennsylvania and on Red River of Lake Winnepeek [=Winnipeg; stated in description].

Exchange of Specimens. Say sent specimens to Germar as "10 Rynchites angustatus, Herbst [on next line:] Rhinom. collaris? Fabr." (Ref. 10), to Winthem as "93 Rynchites quercus, nob." (Ref. 11), and to Schönherr as "(679) 19 quercus, n." (Ref. 15).

Interpretations. Say substituted in Ref. 15 the name R. rubricollis with R. quercus [Knoch; in Melsheimer, 1806: 31]. Say (1831b: 5) synonymized R. rubricollis with R. collaris (Fabricius, 1801) and R. angustatus (Herbst, 1797), probably based on information received from Schönherr (Ref. 18). Schönherr (1839: 341) listed the specimen received from Say as R. quercus under Eugnamptus collaris var. γ. LeConte (1859: 263) gave Eugnamptus angustatus (Herbst) priority over E. collaris (Fabricius).

Extant Types. None known. The specimens sent to Germar and Schönherr have no collecting data and were distributed under different names in any case. If the syntype from Lake Winnipeg was given to Peale (Ref. 1), it may be considered lost.

American Entomology, or Descriptions of the Insects of North America; Illustrated by Coloured Figures from Original Drawings Executed from Nature. Vol. 1. Philadelphia: Mitchell.

Date of Publication. [30] November 1824 (Canadian Magazine and Literary Repository 17, p. 464; also mentioned on 1 December 1824 in Ref. 6).

Calandra quinque-punctata [sic] Say, 1824d, [signature H, unnumbered page], plate 9

Modern Name. Rhodobaenus quinquepunctatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Southern sea islands of Georgia and East Florida [stated in description].

Exchange of Specimens. Say sent Schönherr probably two specimens as "58 5-punctata, n. Florida" (Ref. 15).

Interpretations. Vaurie (1981: 172) recognized R. quinquepunctatus based on Say's original description and illustration, the taxa actually occurring at the type localities, and a novel character on the aedeagus discovered by Kuschel. The latter character was used to distinguish similarly colored species, with which it had been partially confounded in previous studies.

Extant Types. Two putative syntypes are in drawer 44 of the Schönherr Collection (NHRS) under Calandra variabilis var.  $\delta$ , with Schönherr's label "C. 5-punctata./ Say./ Florida. Say." One of them lacks the head and prothorax.

Descriptions of New Species of Coleopterous Insects Inhabiting the United States. *Journal of the Academy of Natural Sciences Philadelphia* 5(2): 237–284.

Date of Publication. [30] November 1826 (Fox, 1913: viii).

Notes. The paper is a compilation of descriptions Say had prepared during the preceding 10 years as an aid for his identifications. It contains many of Knoch's and Melsheimer's unavailable names and some descriptions were based on specimens owned by his correspondents. The manuscript was presented to the Academy on 18 January 1825 and then published in three parts. The first came out almost immediately after Say's departure to New Harmony in late November 1825. It was still in press on 21 November 1825 when Say referred to it in a letter to Harris (Ref. 9). The printing of the other two parts corresponds closely to Say's visit to the Academy in November 1826. Many but not all type specimens were shipped with his insect collection from Philadelphia to New Harmony and arrived with considerable damage in middle October 1827. In early January 1828, when passing through New Orleans on the way

to Mexico, Say mailed numerous of the salvaged types to Germar and Winthem (Refs. 10 and 11).

#### Anthribus notatus Say, 1826: 248

Modern Name. Euparius lugubris (Olivier, 1795).

Origin of Specific Name. Anthribus notatus; Knoch (in Melsheimer, 1806: 32).

Type Locality. United States [from title of paper]; not common.

Exchange of Specimens. None known.

Interpretations. The name has been considered a junior subjective synonym of *Macrocephalus lugubris* Olivier since Melsheimer (1853: 99).

Extant Types. None known.

#### Anthribus capillicornis Say, 1826: 249

Modern Name. Piesocorynus moestus (J. E. LeConte, 1824).

Origin of Specific Name. Anthribus capillicornis; Knoch (in Melsheimer, 1806: 32).

Type Locality. United States [from title of paper].

Exchange of Specimens. None known.

Interpretations. Melsheimer (1853: 99) treated A. capillicornis as a synonym of A. moestus J. E. LeConte in the genus Stenocerus Schönherr, 1826. In his annotated compilation of Say's publications, Le-Conte (1859: 313) interpreted the name as a synonym of Araecerus coffeae (Fabricius, 1775). Gemminger and Harold (1872: 2749) considered all three names as synonyms of A. fasciculatus (De Geer, 1775) [under Araeocerus Schönherr, 1839]. LeConte (in LeConte and Horn, 1876: 407) recognized A. moestus as a species of Piezocorynus Schönherr, 1839 [=Piesocorynus Dejean, 1834], but maintained A. capillicornis as a synonym of A. fasciculatus. Wolfrum (1929: 65) recorded A. capillicornis again as a synonym of A. moestus, now under Piezocorynus.

Extant Types. None known.

#### Anthribus 4-notatus Say, 1826: 249

Modern Name. Goniocloeus bimaculatus (Olivier, 1795).

Origin of Specific Name. Anthribus quadrinotatus; Melsheimer (in Melsheimer, 1806: 32).

Type Locality. United States [from title of paper].

Exchange of Specimens. None known.

Interpretations. The name has been considered a junior subjective synonym of Macrocephalus bimaculatus Olivier, 1795 since LeConte (1859: 314). The Melsheimer family copy of Melsheimer (1806) has a handwritten note, "partim Say J. 5 249.2," possibly alluding to the unnamed variety in Say's type series.

Extant Types. None known.

#### Anthribus limbatus Say, 1826: 250

Modern Name. Trigonorhinus limbatus (Say).

*Órigin of Specific Name. Anthribus limbatus*; Melsheimer (in Melsheimer, 1806: 32).

*Type Locality*. United States [from title of paper].

Exchange of Specimens. None known.

Interpretations. The name seems to be used at least partially in the sense of LeConte and Horn (1876: 406). Valentine (1998: 280) reported about two distinct, geographically variable, originally allopatric species of the T. limbatus complex that hybridize at places where they occur together. He treated the predominantly eastern population as T. limbatus and the western as T. griseus (LeConte, 1876). His supposed hybrid population showed considerable phenotypic variation, which he believed to be manifested genetically. Based on these results, Valentine (1998) synonymized with T. limbatus seven nominal taxa described by LeConte (in LeConte and Horn, 1876), Jordan (1907), and Dethlefsen (1954).

Extant Types. None known.

#### Anthribus alternatus Say, 1826: 250

Modern Name. Trigonorhinus alternatus (Say).

*Órigin of Specific Name*. Proposed by Say.

Type Locality. United States [from title of paper].

Exchange of Specimens. None known.

Interpretations. The name is being used in the sense of LeConte and Horn (1876: 405). The Melsheimer family copy of Melsheimer (1806) contains a handwritten note that this is Anthribus varius [=Anthribus nebulosus Forster, 1770].

Extant Types. None known.

#### Anthribus variegatus Say, 1826: 251

Modern Name. Trigonorhinus sticticus (Boheman, 1833).

Origin of Specific Name. Anthribus variegatus; Knoch (in Melsheimer, 1806: 32).

Type Locality. United States [from title of paper]; not uncommon on heads of wheat.

Exchange of Specimens. Say sent specimens to Germar as "35 Anthribus variegatus, nob." (Ref. 10) and to Winthem as "89 Anthribus variegatus, nob." (Ref. 11).

Interpretations. Anthribus variegatus was recognized as a senior synonym of Brachytarsus obsoletus Fåhraeus, 1839, by Le-Conte (1859: 315) and of B. sticticus Boheman, 1833, by Germar (in Taschenberg, 1869: 246). Bovie (1906: 315) used B. sticticus as valid because Say's more senior name is a primary homonym of A. variegatus Geoffroy, 1785.

Extant Types. The Germar Collection (MLUH, drawer 9/2/4) has three unlabeled, possibly remounted specimens that may include syntypes.

#### Anthribus tomentosus Say, 1826: 248

Modern Name. Trigonorhinus tomentosus (Say).

Origin of Specific Name. Anthribus tomentosus; Melsheimer (in Melsheimer, 1806: 32). Type Locality. United States [from title of paper]; not common.

Exchange of Specimens. None known.

Interpretations. The name is being used for a variable and abundant North and Central American species (Valentine, 1998: 281). Initially, it was applied in a more restricted sense to North American specimens with predominantly brownish vestiture (LeConte and Horn, 1876: 406; Valentine in Hatch, 1971: 246; Bright, 1993: 43). Valentine (1998) favored a broader eoncept because of geographic and seasonal variation that involves clines from North to South, East to West, and summer to autumn.

Extant Types. None known.

#### Attelabus pubescens Say, 1826: 252

Modern Name. Himatolabus pubescens (Say).

Origin of Specific Name. Attelabus pubescens; Melsheimer (in Melsheimer, 1806: 31).

Type Locality. United States [from title of paper]; not uncommon, on Corylus americana.

Exchange of Specimens. Say sent Schönherr one specimen as "16 (45) badius, n. — Fabr.?" which Sehönherr (1833a: 203) identified as A. rhois Knoch.

Interpretations. Say (1826) used in the description Melsheimer's name A. pubescens and Boheman (1829: 121) used Knoeh's name A. rhois. Say (1831b: 4) synonymized them under A. pubescens. The priority of names was reversed by Schönherr (1839: 307) and reestablished by Buchanan in Voß (1929: 209), who transferred them to Himatolabus Jekel, 1860. Hamilton (1983: 20) designated a neotype for A. pubescens in the sense of Say (1831b).

Extant Types. None known. Hamilton (1983) designated a neotype from Hocking Co., Ohio.

*Notes*. Say annotated in his personal copy of Melsheimer (1806) under A. pubescens that this name, A. nitidus of Sturm, A. analis of Sturm, and A. analis Illiger all refer to one and the same species. The specimen sent to Germar under the name  $ilde{A}$ . analis (Ref. 10) was acknowledged by the recipient as A. pubescens (Ref. 22). The specimen sent to Schönherr under the manuscript name A. badius (Ref. 15) is mentioned in Schönherr (1833a: 203) under *A. rhois*. I was unable to find either of these specimens in MLUH and NHRS. The confusion of names suggests that the 1827 transfer of the collection to New Harmony left Say's attelabids in such a disarray that he mixed up names.

#### Attelabus scutellaris Say, 1826: 252

Modern Name. Piazorhinus scutellaris (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [from title of work]; eollected on flowers of Kalmia latifolia in July.

Exchange of Specimens. Say sent Germar at least one specimen as "9 Attelabus scutellaris, nob. X" (Ref. 10) and one to Schönherr as "15 (G<sup>s</sup>. Momonus) scutellaris, n. J.A.N.S." (Ref. 15).

Interpretations. The description is diagnostic. LeConte (in LeConte and Horn, 1876: 210) and Champion (1903: 228) each provided redescriptions and keys.

Extant Types. The Germar Collection (MLUH, drawer 9/2/14) has four unlabeled, possibly remounted specimens, some of which may be syntypes of Say's 1828 shipment. Drawer 121 of the Schönherr Collection (NHRS) contains one putative syntype with Schönherr's label, "Momonus/scutellaris/ Say./ Amer. bor. Say."

Notes. Schönherr (1833a: 20) used A. scutellaris (also listed as Momonus id. [=scutellaris] Say) in a synoptic table as the type species for his new genus Acama-

tus. Although Say had described Momonus in a manuscript submitted to the Journal of the ANSP, the paper was never published. Alonso-Zarazaga and Lyal (1999: 81) considered Momonus as unavailable (proposed as a synonym) and expressed their intention to apply for a ruling that would preserve Piazorhinus Schönherr, 1835, over its unused senior synonym Acamatus Schönherr, 1833. A few days later, ICZN (1999) Article 23.9 made this application unnecessary; prevailing usage must be maintained when (i) the senior name has not been used as a valid name after 1899 and (ii) the junior name has been used for a particular taxon, as its presumed valid name, in at least 25 works by at least 10 authors during the immediately preceding 50 years and encompassing a span of not less than 10 years. The first provision is met to my best knowledge and the following citations fulfill the second: Weidner (1979: 401), O'Brien and Wibmer (1982: 116), Wibmer and O'Brien (1986: 210), Borror et al. (1989: 468), Anderson (1993: 207), Lyal and King (1996: 771), Poole and Gentili (1996: 229), Peck and Thomas (1998: 153), Wolda et al. (1998: 70), Alonso-Zarazaga and Lyal (1999: 81), Anderson (2002: 792), Morrone et al. (2002: 154), Ødegaard (2003: 235), Bouchard et al. (2005: 570), Jones et al. (2005: 429), Flinte et al. (2006: 515), Majka et al. (2007: 417), Bright and Bouchard (2008: 16), Ciegler (2010: 232), Majka (2010: 40), Bouchard et al. (2011: 583), Webster et al. (2012: 355), Caldara et al. (2014: 604), Evans (2014: 475), and Skvarla et al. (2015: 23). Therefore, under ICZN Article 23.9.2, Piazorhinus Schönherr, 1835, is a nomen protectum and Acamatus Schönherr, 1833 (not Emery, 1894), a nomen oblitum.

#### Apion rostrum Say, 1826: 253

Modern Name. Trichapion rostrum (Say). Origin of Specific Name. Rhynchites rostrum; Knoch (in Melsheimer, 1806: 32). Type Locality. United States [from title of work]. Abundant on leaves of Robinia pseudacacia and in seeds of Baptisia tinctoria.

Exchange of Specimens. Harris sent Say at least one voucher of his species 98 that "is to be found in all stages within the legumes of Baptisia (Sophora L.) tinctoria, in the months of Aug't and Sept'r" (Ref. 5), which Say returned as "98 Apion puncticolle nob. Mss" (Ref. 7). However, he substituted "Mss" with "Lyc" [=Lyceum of Natural History] in Ref. 8. Say sent specimens to Germar as "13 Apion nigrum? Herbst [on next line:] rostrum, nob." (Ref. 8) and to Winthem as "94 Apion nigrum, Herbst" (Ref. 11); Germar confirmed the possession of specimens in Ref. 22, and Taschenberg (1869: 189) recorded five specimens. Say sent Schönherr one specimen as "57 rostrum, n." (Ref. 15) which was described subsequently as Apion sayi Gyllenhaal, 1833. Faldermann sent Schönherr one specimen under the name Apion rostrum which was described subsequently as *Apion* scrobicolle Gyllenhaal, 1839. Harris sent Schönherr two specimens as "49. Apion rostrum? Say (Hentz 1257) (Harris 259?) N. Car." and "50 bis. Apion rostrum, Say. (Harris 259) Mass." (Ref. 24).

Interpretations. Say initially described a black apionid as Apion puncticolle (Refs. 7 and 8), but the Lyceum of Natural History of New York did not publish the manuscript. The description appeared eventually with Melsheimer's (1806) name, Apion rostrum, in the journal of ANSP. The type series consisted of specimens found by J. F. Melsheimer on the leaves of Robinia pseudoacacia [in August 1824, according to a handwritten note in Say's personal copy of Melsheimer (1806)] and specimens found by Harris and Say himself in the pods of Baptisia tinctoria. Say suspected in his correspondence with Germar (Ref. 10) and again in Say (1831b: 6) that his A. rostrum may be A. nigrum (Herbst, 1797). When Schönherr received two distinct

species under the name A. rostrum from Say and Faldermann, they were described as A. sayi Gyllenhaal, 1833, and A. scrobicolle Gyllenhaal, 1839, respectively. Schönherr (1839: 376) recognized that A. rostrum Say, 1826, is an available name for A. sayi and synonymized the two. Harris (1841: 59) applied the name A. sayi, with A. rostrum as a synonym in the footnote, to his species bred from Baptisia and noted that another, somewhat smaller species develops in the pods of Robinia. This classification prevailed until Kissinger (1968: 90) designated a neotype for A. rostrum in the sense of Faldermann, thereby making A. scrobicolle a junior synonym of A. rostrum and resurrecting A. sayi as the valid name for Say's A. rostrum in the Schönherr Collection. He gave no explanation for this neotype designation but A. rostrum in his sense is the seed predator from *Baptisia*.

Extant Types. At least four specimens of Harris' material have been preserved, three of them in his personal eollection (MCZ) and one in drawer 157 of the Schönherr Collection (NHRS); their type status is uncertain, but they may include the specimen(s) taken from *Baptisia* pods and mentioned by Say (1826). Say sent German specimens of A. rostrum almost exactly 1 year after the publication of the description (Ref. 12); at least one of the six specimens in MLUH drawer 9/2/12 should be a syntype. Kissinger (1968) designated for A. rostrum a neotype from Stoney Mills Creek, Pennsylvania. Hentz' North Carolina specimen (item 49 in Ref. 24), labeled by NHRS staff as an allotype and by Kissinger as a paratype of Apion sayi, has no type status because the description of A. sayi predates Harris' shipment by 3 years.

Notes. Alonso-Zarazaga (2011: 78) recognized that *Curculio obscurus* Marsham, 1802, (not Fabricius, 1775) is still another synonym of *A. rostrum* in Kissinger's sense. The two syntypes and the above-mentioned holotype of *A. scrobicolle* Gyllenhaal each

came with the erroneous provenance "Anglia" (Alonso-Zarazaga, 2011). I believe that the true origin of these specimens was New England rather than England. Melsheimer's syntypes from *Robinia pseudoacacia* were a different species, either *A. nigrum* or *A. porcatum* Boheman, 1839; the latter was described from a specimen submitted by Harris. *Apion sayi* is associated with species of *Strophostyles* according to Kissinger (1959: 308).

#### Brachycerus humeralis Say, 1826: 254

Modern Name. Thecesternus humeralis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Near the headwaters of the Arkansa river, not uncommon [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "4 Brachycerus humeralis nob. X" (Ref. 8).

Interpretations. The name has been applied by most authors to specimens with an extremely projecting humeral protuberance (LeConte, 1856: 18; Laeordaire, 1863: 307, fig. 67.3; Pieree, 1909: 336; MeCollum, 2011: 36).

Extant Types. I found one syntype in the unsorted remnants of the Say Collection (MCZ) with the label "Thecesternus/ humeralis, S./ Lithodus id. Germ./ & Sehönh." (Prena, 2015, fig. 3). The Germar Collection (MLUH, drawer 9/2/2) has one specimen on a short thick pin with a green triangular and a second, formerly colored, square label. This specimen should be regarded as the type of Lithodus humeralis Germar, 1834, and as a syntype of B. humeralis Say. The type status of three other specimens standing in this series is uncertain. McCollum (2011: 36) designated a neotype in a thesis work that I do not consider as a published work in the sense of ICZN Article 8.1.

#### Bostrichus exesus Say, 1826: 255

Modern Name. Ips calligraphus (Germar, 1823).

Origin of Specific Name. Bostrichus exesus; Knoch (in Melsheimer, 1806: 8).

Type Locality. United States [from title of work], probably Pennsylvania [Wood (1982: 697)].

Exchange of Specimens. Say sent Winthem at least one specimen as "100 Bostrichus exesus, nob." (Ref. 11). In the family copy of Melsheimer (1806), J. F. Melsheimer noted under 144 Exesus, "Tomicus calligraphus Germ." and "Sent to Say."

Interpretations. The species became rather widely known when Harris (1841: 74) described its biology. Melsheimer (1853: 87) and LeConte (in LeConte, 1859: 318; in Zimmermann, 1868: 162; in LeConte and Horn, 1876: 363) treated B. exesus as a subjective junior synonym of B. calligraphus. Wood (1982: 697) assumed that the types are lost and based the identities of Say's and Germar's species on material housed in North American collections; he did not examine the extant Knoch and Germar material.

Extant Types. None known. The specimens sent to Winthem came to E. Lüders in 1848, to the Hamburg Museum in 1855, and were destroyed by fire in 1943 (Weidner, 1976: 87).

#### Bostrichus fasciatus Say, 1826: 255

Modern Name. Monarthrum fasciatum (Say).

*Origin of Specific Name. Bostrichus fasciatus*; Knoch (in Melsheimer, 1806: 8).

Type Locality. United States [from title of work], probably Pennsylvania [Wood (1982: 1235)]; variety A from Sinnipuxent [=Sinepuxent, Maryland; stated in description].

Exchange of Specimens. None known.

Interpretations. LeConte (in LeConte and Horn, 1876: 348) considered B. fascia-

tus as a senior subjective synonym of Pterocyclon simile Eichhoff, 1869. Wood (1982) assumed that all syntypes are lost and based the identity of Say's species on specimens standing under this name in the LeConte Collection (MCZ).

Extant Types. None known.

Notes. In the correspondence of the early North American entomologists (e.g., Ref. 10), Ips fasciatus applied to the nitidulid Glischrochilus fasciatus (Olivier, 1790).

#### Bostrichus xylographus Say, 1826: 256

Modern Name. Xyleborus xylographus (Say).

Origin of Specific Name. Bostrichus xylographus; Knoch (in Melsheimer, 1806: 8).

Type Locality. United States [from title of work], presumably eastern USA [Wood 1982: 836].

Exchange of Specimens. None known.

Interpretations. The historical literature on X. xylographus is confused and applied to more than one species. Schwarz (1895: 609) arrived at the conclusion that the description of *B. xylographus* was a chimera of two descriptions, with the part about the larval work actually applying to a different species, i.e., B. xanthographus in Melsheimer (1806: 8). This is corroborated by a handwritten comment in the family copy of Melsheimer (1806) and the treatment of the two names in Melsheimer (1853: 87). Bright (1968: 1313) designated a neotype for B. xylographus and considered X. canadensis Swaine, 1917; X. inermis Eichhoff, 1868; and X. planicollis Zimmermann, 1868, as synonyms. The original material of Knoch (who established the name in litteris based on Melsheimer specimens, many of which were studied by Say) apparently was not considered in this action. Wood (1982) resurrected X. planicollis from synonymy with X. xylographus.

Extant Types. Bright (1968) designated a female neotype from North Carolina.

#### Bostrichus politus Say, 1826: 256

Modern Name. Xyloterinus politus (Say). Origin of Specific Name. Apate politus; Melsheimer (in Melsheimer, 1806: 7).

Type Locality. United States [from title of work], eastern United States [Wood 1982: 745].

Exchange of Specimens. None known.

Interpretations. The name is being used in the sense of LeConte (in Zimmermann, 1868: 159). Wood (1982) expressed the view that LeConte and Fitch might have seen type specimens but this is unlikely.

Extant Types. None known.

#### Bostrichus pini Say, 1826: 257

Modern Name. Ips pini (Say).

Origin of Specific Name. Bostrichus pini; Melsheimer (in Melsheimer, 1806: 8).

Type Locality. United States [from title of work], probably Pennsylvania [Wood 1982: 691].

Exchange of Specimens. Say sent Winthem at least one specimen as "a Bostrichus pini, nob." (Ref. 11).

*Interpretations.* Say noted in his personal copy of Melsheimer (1806) that Bostrichus *pini* is the same as *B. exesus* and, perhaps, B. typographus. A handwritten note in the Melsheimer family copy of Melsheimer (1806) states that Say considered the B. typographus of Knoch a variety of B. pini, whereas the writer [probably F. E. Melsheimer] regarded them as "widely different." LeConte (in Zimmermann, 1868: 162) noted that Zimmermann confounded *B*. pini with Tomicus cacographus LeConte, 1866 [now Ips grandicollis (Eichhoff, 1868)], while the true B. pini is Tomicus praefrictus Eichhoff, 1868. Wood (1982: 691, 838) considered the types of B. pini lost and followed LeConte's interpretation while referring B. pini sensu Eichhoff (1868) to Xyleborus pubescens Zimmermann, 1868.

Extant Types. None known. The specimens sent to Winthem came to E. Lüders in 1848, to the Hamburg Museum in 1855,

and were destroyed by fire in 1943 (Weidner, 1976: 87).

Notes. The Harris Collection (MCZ) contains a specimen (no. 1277) that apparently was identified by Say as *B. pini* and by someone else [with initials P.S.S.] as *Xyleborus celsus* Eichhoff, 1868.

#### Hylurgus dentatus Say, 1826: 258

Modern Name. Phloeosinus dentatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [from title of work], presumably Milton, Massachusetts [Wood 1982: 294].

Exchange of Specimens. Harris sent Say one specimen with the comment "No. 107 beneath [the bark] of the Juniperus virginiana" (Ref. 5). The specimen was mentioned in the description and returned to the owner as "107 Hylurgus dentatus nob. Mss." (Ref. 7).

Interpretations. The species and its biology was documented fairly well in Harris (1841: 73). However, LeConte (1859: 320) was in doubt about its identity and later (in Zimmermann, 1868: 170) lumped *H. dentatus* with another more western species, later described as *Phloeosinus punctatus* LeConte, 1876. Wood (1982) interpreted *H. dentatus* based on specimens standing under this name in the LeConte Collection.

Extant Types. None known.

Notes. I was unable to locate the specimen of Ref. 7 in the collections of Harris, LeConte, and Horn (MCZ) in 2011 and 2013. It should be noted that Ref. 8 (Say's retained draft of Ref. 7) links the name to a never published manuscript submitted to the Lyceum of Natural History; the entry is followed by what appears to be a count of five specimens. This suggests that the type series included more specimens than just the one mentioned in the description.

Descriptions of New Species of Curculionites of North America, with Observations on Some of the Species Already Known [signature 1, pp. 1–8].

Date of Publication. [31] July 1831 (on title page); probably not distributed before May 1832.

Notes. Say, who had provided weevils for Schönherr's upcoming Genera et species curculionidum, rushed this publication to claim authorship priority for the North American species (Prena, 2015). The resulting pamphlet (which Say himself typeset and printed in New Harmony's School press) combined several data sources over different time scales. Its four signatures were printed at different dates and contained unpublished information from Schönherr's manuscripts. Say already had descriptions for most species (apparently for all in the first three signatures) before he shipped vouchers along with his identifications and manuscript names to Schönherr on 18 March 1830. None of them were assigned to genus. On the accompanying list (Ref. 15), Say requested specimens "to be returned in case there is no other sp. of that genus in the box." The material reached Schönherr with some damage on 1 October 1830 (Ref. 18). The printing of the first signature is tightly connected with Schönherr's first response letter, from 23 April 1831, which contained comments on some of the first 25 species (Ref. 18). Say used these comments, in particular the generic combinations, thereby making available Schönherr's new genera Pterocolus and Graphorhinus. Several of the newly described species were neither mailed to Schönherr nor did they show up elsewhere. It is possible that these descriptions were drafted in Philadelphia from specimens that already were destroyed by the time of printing. The first eight species contained in the first signature no longer are included in Curculionoidea and therefore are excluded from this inventory.

## Anthribus (Tropideres) cornutus Say, 1831b: 4

Modern Name. Toxonotus cornutus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. LeConte (1859: 262) recognized A. cornutus as the valid name for Euparius coronatus Gyllenhaal, 1833. Schaeffer (1904: 236) provided a key to this and four other North American species; Valentine (1998: 289) distinguished between six species of Toxonotus Lacordaire, 1865.

Extant Types. None known.

## Anthribus (Phaenithon?) brevicornis Say, 1831b: 4

Modern Name. Phaenithon brevicorne (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Mexico [stated in description]; probably vicinity of Mexico City [Barber 1928].

Exchange of Specimens. None known.

Interpretations. The name is a nomen dubium (Schönherr, 1839: 267; Jordan, 1906: 360). Its placement in *Phaenithon* Schönherr, 1826, is based on Say's tentative assignment in the description.

Extant Types. None known.

#### Rhynchites aeratus Say, 1831b: 5

Modern Name. Temnocerus aeratus (Say).

*Origin of Specific Name*. Possibly from *Curculio aeratus*; Knoch (in Melsheimer, 1806: 30).

*Type Locality*. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "(658) 51 aeratus, n." (Ref. 15).

Interpretations. LeConte (in LeConte and Horn, 1876: 9) applied the name to a species with a finely punctate head and distinguished it from the equally widespread Rhynchites cyanellus LeConte, 1876. Voß (1932: 187) and Hamilton (1971: 995) used the same taxonomy.

Extant Types. The only known syntype is in drawer 155 of the Schönherr Collection (NHRS) with the label "Rh: aeratus. Say/Amer. bor. Say." Hamilton (1971) designated a neotype from Milford, Pennsylvania.

Notes. I here designate the above-cited specimen in the Schönherr Collection as the lectotype for *R. aeratus* Say and, under Article 75.8, set aside the neotype of Hamilton (1971). The lectotype agrees with the current interpretation of the species.

#### Apion segnipes Say, 1831b: 6

Modern Name. Sayapion segnipes (Say). Origin of Specific Name. Proposed by Say.

Type Locality. Indiana; obtained from the seeds of Astragalus [stated in description].

Exchange of Specimens. None known. Three non-type specimens in the Germar Collection (MLUH), with provenance Carolina, probably came from Hentz.

Interpretations. At least since Smith (1884: 59), the name is being used for a species that is said to develop in the seeds of Tephrosia virginiana and which Kissinger (1999: 72) used as the type species for Sayapion Kissinger, 1999. The originally recorded association with Astragalus is unconfirmed.

Extant Types. None known. Kissinger (1968: 166) designated a neotype from Fayetteville, North Carolina.

## Thamnophilus (Panus) barbitus Say, 1831b: 6

Modern Name. Magdalis barbitus (Say). Origin of Specific Name. Curculio barbitus; Knoch (in Melsheimer, 1806: 27). Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "(578) 20° barbitus, n." (Ref. 15).

Interpretations. Horn (1873: 454) provided a redescription of *M. barbita* [sic] along with a key to 12 North American species. His interpretation of the name has been used consistently in the subsequent literature.

Extant Types. The holotype (asterisk on Say's list) is in drawer 114 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "Rh: barbitus./ Amer. bor./ Say."

Notes. When Gemminger and Harold (1871: 2493) placed the name in Magdalis, they and most subsequent authors (including myself) were unaware that the specific name is a noun in apposition. Knoch obviously was inspired by the deeply striate elytra of this and the next species when he chose Greek words denoting string instruments.

#### Thamnophilus pandura Say, 1831b: 7

Modern Name. Magdalis pandura (Say). Origin of Specific Name. Curculio pandura; Knoch (in Melsheimer, 1806: 27).

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "23 Rynchaenus pandura, nob." (Ref. 10) and to Schönherr one as "(581) 27∗ [■?] pandurus, n." (Ref. 15).

Interpretations. Horn (1873: 456) provided a redescription of *M. pandura* along with a key to 12 North American species. His interpretation of the name has been used consistently in the subsequent literature.

Extant Types. It is obvious that Say used Knoch's manuscript name but it is unknown when and with which specimens he prepared the description. The vague habitat data add to this ambiguity. The short lag

time between shipping and printing leave little doubt about the type status of the specimen in the Schönherr Collection (NHRS, drawer 114, labeled "Rh: pandurus/Say./ Amer. bor. Say"). The specimen in the Germar Collection (MLUH, drawer 9/2/13, labeled "pandura Say/ Sr") was mailed 3.5 years before publication. It may be considered a syntype under the assumption that it was in Say's possession when he drafted the description.

#### Thamnophilus pallidus Say, 1831b: 7

Modern Name. Magdalis armicollis (Say, 1824).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. Horn (1873: 457) redescribed M. pallida and considered it as a distinct species near M. armicollis. Blanchard (1887: 86) recognized M. pallida as the female of M. armicollis.

Extant Types. None known. One unlabeled specimen of unknown type status is at WMI.

## Graphorhinus vadosus Say, 1831b: 8 [three lines of description in Say (1832b: 9)]

Modern Name. Graphorhinus vadosus Say.

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri, collected by Nuttall [stated in description], Arkansaw [Ref. 15], St. Louis [label data on Say's specimen in NHRS].

Exchange of Specimens. Say sent Schönherr one specimen as "67 vadosus, n. Arkansaw" (Ref. 15).

Interpretations. Horn (in LeConte and Horn, 1876: 19) redescribed and keyed the species. The name has been applied consistently in his sense.

Extant Types. One syntype is among the salvaged Say material in MCZ (Mawdsley, 1993: 167). It has Say's handwritten label "67/ vadosus/ n." (Prena, 2015, fig. 3), with the number matching the record in Ref. 15. Another syntype is in drawer 193 of the Schönherr Collection (NHRS). It bears Schönherr's handwritten label "E: vadosus. Say/ St: Lui: Am: bor./ Say."

Notes. Three lines of the description with information on size, habitat, and collector appear on page 9, which was printed at a later date than page 8. However, the text on page 8 fulfills all requirements for making the name available (Article 10.1.1). Graphorhinus vadosus is the type species of Graphorhinus Schönherr, 1831 (in Say, 1831b), by indication (monotypy), not by subsequent designation of authors, because it was the only included species at this date.

Descriptions of New Species of Curculionites of North America, with Observations on Some of the Species Already Known [signatures 2 and 3, pp. 9– 24].

Date of Publication. Before 5 May 1832 (copy received by Harris; Scudder, 1899: 400).

*Notes.* The second and third signature of the Curculionites pamphlet each have a different layout, but I found no evidence that they were printed separately at different dates. The descriptions contain information that Say received with Schönherr's second letter (Ref. 19). Say informed Harris on 21 December 1831 (Ref. 20): "I am now occupied with a paper on the Curculio family & have almost determined to published [sic] those which I have already described & have the rest for a supplement, larger than the first paper. In fact I may say that the paper has been prepared a long time & I am now occupied in reviewing it." Harris received the first three signatures of the pamphlet on 5 May 1832 (Scudder, 1899). On 8 September 1832 Say wrote to

Harris (Ref. 21) that "this pamphlet you have, no doubt received long since; I am now printing a Supplement to it, which shall also be sent to you."

#### Graphorhinus operculatus Say, 1832b: 9

Modern Name. Epicaerus operculatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Mexico [stated in description and Ref. 15]; probably vicinity of Mexico City (Barber, 1928).

Exchange of Specimens. Say sent Schönherr one specimen as "\*112 operculatus, n. Mexico" (Ref. 15).

Interpretations. Sharp (1891: 129) and Champion (1911: 329) reassessed the species in a major context, i.e., the Biologia Centrali-Americana, based on Schönherr's type.

Extant Types. The holotype (asterisk on Say's list) is in drawer 193 of the Schönherr Collection (NHRS). It is labeled "Gr: opercu/ latus. Say./ Mexico. Say."

## Deracanthus (Aracanthus) pallidus Say, 1832b: 9

Modern Name. Aracanthus tessellatus (Say, 1824); **new synonym**.

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "124 pallidus, n." (Ref. 15). He used under number 92 the name again for a different species, later described as *Notiodes limatulus* Gyllenhaal, 1835.

Interpretations. Deracanthus pallidus was redescribed by Fåhraeus (in Schönherr, 1840a: 822) based on species 124 on Say's list, the actual type specimen. Melsheimer (1853: 93) confused *D. pallidus* with *Bagous pallidus* Say ms, which was species 92 on the same list and meanwhile described as

Notiophilus limatulus Gyllenhaal. Lacordaire (1863: 489) noticed Melsheimer's error but did not recognize the species. Horn (in LeConte and Horn, 1876: 110) recognized the species as a member of Eudiagogini.

Extant Types. A damaged specimen with the label "Deracanthus/ (Arachanthus)/ pallidulus Say/ Civitates Foe-/ deratae - Say." is preserved in drawer 170 of the Schönherr Collection (NHRS). It consists of metathorax, hind legs, and left elytron, all still attached to each other and glued on a card. The specimen agrees with the description and cannot be confused with Thamnophilus pallidus Say, 1831 [=Magdalis armicollis (Say, 1824)] or Bagous pallidus Say ms [=Notiodes limatulus (Gyllenhaal, 1835)].

Notes. The asterisk associated with item 124 on Say's list indicates that the specimen in the Schönherr Collection is the holotype of *D. pallidus* Say. Even though damaged, it still can be identified. *Deracanthus pallidus* is a new junior synonym of *Aracanthus tessellatus* (Say), a name previously misapplied to a species of Naupactini (see above under *Liparus tessellatus*).

#### Thylacites microps Say, 1832b: 9

Modern Name. Minyomerus microps (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description and Ref. 15]. Almost certainly eastern half of present-day Colorado based on travel route (Barber, 1928) and available distribution records (Jansen and Franz, 2015).

Exchange of Specimens. Say sent Schönherr one specimen as "\*91 microps, n. Arkansaw Missouri" (Ref. 15).

Interpretations. LeConte (1859: 268) was the first to recognize that Thylacites microsus Boheman, 1833, is the same as T. microps Say. However, the name is not

treated in LeConte and Horn (1876). Buchanan (in Blackwelder and Blackwelder, 1948: 46) transferred T. microps to Minyomerus Horn, 1876. Jansen and Franz (2015: 45) recognized M. microps as the valid name for M. innocuus Horn, 1876.

Extant Types. The holotype (asterisk on Say's list) is in drawer 171 of the Schönherr Collection (NHRS). It is also the holotype of T. microsus, a junior objective synonym.

#### Tanymecus lacaena Say, 1832b: 9

Modern Name. Tanymecus confertus Gyllenhaal, 1834; resurrected name.

Origin of Specific Name. With doubt referred to Curculio lacaena Herbst, 1797.

Type Locality. Not stated in description. Missouri [Ref. 15].

Exchange of Specimens. Say sent Germar at least one specimen as "5 Curculio lacaena, Herbst" (Ref. 10) and Schönherr one as "■106 confertus, n. Missouri" (Ref.

Interpretations. Two species of Tanymecus Germar, 1817, occur in the eastern United States. Species A has a bulky pronotum with the greatest width in the middle; Species B has a relatively small pronotum (much narrower than the elytra) with the greatest width in the anterior half. The name generally applied to Species A is T. lacaena (Herbst, 1797), which was described from the Herschel Collection and is figured on plate C of the original work. The fate of Herschel's specimens is unknown, but I suspect that his North American beetles came from August Gottlieb Oemler, who emigrated from Hettstedt to Savanna, Georgia, around 1791. Say wondered in the description of T. lacaena Say, 1832, whether it is the same as the above-mentioned C. lacaena Herbst. A little later, Gyllenhaal (in Schönherr, 1834a: 88) described Species B as Tanymecus confertus based on a specimen received from Say under that name. Schönherr (1840b: 232, 241) considered T. lacaena (Herbst) and T.

lacaena Say as distinct species and used T. confertus as the valid name for the latter (i.e., Species B). However, in the reprinted edition of Say (1832b), LeConte (1859: 269) tentatively matched T. confertus with T. confusus Say, 1832, and since then T. lacaena Say has been considered an invalid name for Species A, i.e., T. lacaena (Herbst), and T. confusus Say as the valid name for Species B.

Extant Types. Two syntypes are preserved in the salvaged Say material at MCZ [one of them reported by Mawdsley (1993), the other found by me in the unsorted part]. Say's handwritten label reads "lacaena?/ Herbst." and has his characteristic checkmark in the lower right corner. The specimen mailed to Germar 3.5 years before the printing of the description is in drawer 9/1/23 of the Germar Collection (MLUH).

Notes. Tanymecus lacaena Say is invalid because of secondary homonymy with T. lacaena (Herbst). The two specimens standing in the Say Collection (MCZ) under T. lacaena are T. confertus. It is possible that Say used in the shipment to Schönherr the manuscript name T. confertus instead of T. lacaena but returned to T. lacaena in the published description (Say, 1832b). Tanymecus confertus is resurrected here from synonymy with Tanymecus confusus Say (see notes there).

#### Tanymecus confusus Say, 1832b: 9

Modern Name. Hylobius pales (Herbst, 1797); new synonym.

Origin of Specific Name. Proposed by Say.

Type Locality. Not stated in description. Exchange of Specimens. Say sent Schönherr one specimen as "■63 confusus, n. [later added:] Hylobius, Sch. pales Herbst var. minor" (Ref. 15). Harris sent Schönherr one specimen as "60 Hylobius abietis? L. (spots ferrugineous) confusus Say in litt., Harris 101, N. Car." (Ref. 24; Schönherr, 1842: 300).

Interpretations. Say (1832b) noted in the description that T. confusus has twice the length of T. lacaena Say and lacks thoracic vittae. In his correspondence with Schönherr (Ref. 24), Harris remarked that this species belongs to Hylobius German, 1817, rather than *Tanymecus*. Melsheimer (1853: 97) listed T. confusus under Tanymecus, but in the combined Melsheimer Collection two Hylobius and one Pachylobius picivorus stand under this name (Germar, 1823). LeConte (1859: 269) speculated that T. confusus is T. confertus Gyllenhaal, and this view became established in the subsequent literature.

Extant Types. Two small specimens are in drawer 194 of the Schönherr Collection (NHRS) under Hylobius pales var.  $\beta$ . One came from Say and is a syntype of T. confusus; the other came from Harris and might have been taken from the Say Collection [the *H. pales* specimen sent by Say to Schönherr as no. 12 stands under the nominal variety in drawer 194 and is on a similar pin as the confusus specimen submitted by Harris].

*Notes*. I was unable to find *T. confusus* in the Schönherr Collection during my visit in 2009. The focus of my search shifted to Hylobius once I saw Say's annotation "Hylobius Sch., pales Herbst var. minor" in Ref. 15. Additionally, I noticed that Harris had been aware of T. confusus being a species of Hylobius and that the Melsheimer Collection (MCZ) has Hylobius and Pachylobius under this name. Furnished with this information, I eventually found Say's syntype in the Schönherr Collection under Hylobius pales var.  $\beta$  during my 2015 visit. Schönherr (1834b: 341) referred to it simply as "Var. β. Duplo minor et ultra" but did not mention T. confusus Say. This male specimen, with the label "C: confusus Say/ Amer. bor. Say," is designated here as the lectotype for Tanymecus confusus Say. It is a junior subjective synonym of Hylobius

*pales* (Herbst, 1797), a junior secondary homonym of H. confusus (Paykull, 1792), and a senior secondary homonym of H. confusus Kirby, 1837. All three available Hylobius confusus are invalid names. The valid name for Tanymecus confusus of authors (not Say) is T. confertus Gyllenhaal, 1834.

#### Aphrastus taeniatus Say, 1832b: 9

Modern Name. Aphrastus taeniatus Say. Origin of Specific Name. Proposed by

Type Locality. Not stated in description. Indiana [on Schönherr's label, possibly erroneous].

Exchange of Specimens. Say identified for Harris a specimen he returned with the note "101 Curculio taeniatus nob. Mss." (Refs. 7 and 8). Say sent Schönherr one specimen as "8 taeniatus, n. J.A.N.S." (Ref. 15).

Interpretations. The name of this distinctive species has been applied consistently in the literature.

Extant Types. Say (1832b) referred in the brief description to an unpublished work he had submitted to the Journal of ANSP. This indicates that the description was prepared long before the printing of the Curculionites pamphlet, very likely already before his departure from Philadelphia in November 1825. This would make Harris' specimen a syntype, but I was unable to find it in the MCZ. The only extant syntype appears to be the one in drawer 95 of the Schönherr Collection. It is labeled "P. taeniatus/ Sav./ Indiana, Am:/ bor. Say."

Notes. Horn (in LeConte and Horn, 1876: 99) argued that Gyllenhaal (in Schönherr, 1834b) should be considered the author of the name. However, Say's brief description applies to the species, not the genus.

## Sitona indifferens Say, 1832b: 10

Modern Name. Sitona lineellus (Bonsdorff, 1785).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "95 indifferens, n. Missouri" (Ref. 15), whereupon Schönherr responded, "95. indifferens Say.

— Sitona lineellus auctor. var." (Ref. 19).

Interpretations. Schönherr (Ref. 19) wrote Say that 95 indifferens Say ms is a variety of Sitona lineellus. Nevertheless, Say went on and published the name, possibly because he was unaware of Bonsdorff (1785). The synonymy was published instantly in Schönherr (1834a: 111), while some authors of subsequent publications maintained the name as a variety of S. lineellus. Because type specimens were unknown to them, Smreczyński (1959: 640) and subsequent authors relied on the specimens standing under the various varieties of S. lineellus in the Schönherr Collection. Dieckmann (1980: 296) left it open whether the North American records apply to S. ambiguus Gyllenhaal, 1834, or indeed to S. lineellus, without mention of Say's more senior names in case of a misidentification. Bright (1994: 288), in his revision of the North American species, followed Schönherr's (1834a) synonymy and Smreczyński's (1959) taxonomy and confirmed S. lineellus as the species being present in North America.

Extant Types. The only known extant syntype is in drawer 180 of the Schönherr Collection (NHRS) under Sitones lineellus var.  $\delta$ . It is labeled "indifferens/ Say./ Missuri. Say." and agrees with S. lineellus in the sense of Smreczyński (1959) and Bright (1994). More syntypes might have existed, because Say crossed out the asterisk on his retained list.

## Sitona scissifrons Say, 1832b: 10

Modern Name. Sitona lineellus (Bonsdorff, 1785).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "83 scissifrons, n. Missouri" (Ref. 15), whereupon Schönherr replied, "83. scissifrons Say. — Sitona lineellus var. η. Curculio id<sup>m</sup>. auctor." (Ref. 19).

Interpretations. The history of this name is nearly identical to the one of *S. indifferens* above. In his letter to Say, Schönherr considered 83 scissifrons Say ms as a variety of *S. lineellus*. Bright (1994: 291) noted that in the North American literature *S. scissifrons* was the most frequently used name for *S. lineellus*. He was the first to explicitly place *S. scissifrons* in synonymy of *S. lineellus*, although LeConte (in LeConte and Horn, 1876: 114) used the same arrangement because authoritatively identified specimens were unavailable.

Extant Types. The only known extant syntype is in drawer 180 of the Schönherr Collection (NHRS) under Sitones lineellus var. ε. It is labeled "C. scissifrons/ Say./ Missuri Am./ bor. Say." and matches S. lineellus in the sense of Smreczyński (1959) and Bright (1994). Tanner (1987: 169) designated a neotype from Rock Port, Missouri.

Notes. The neotype of Tanner (1987), which is not traceable according to Bright (1994) and my own research, is set aside here under ICZN Article 75.8.

#### Cleonus trivittatus Say, 1832b: 10

Modern Name. Scaphomorphus trivittatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansaw [stated in description].

Exchange of Specimens. Say sent Germar one specimen as "17 Lixus trivittatus, nob. X" (Ref. 10; specimen mentioned in

Schönherr, 1834a: 222, and Taschenberg, 1869: 174). Say sent Schönherr one specimen which is recorded in Ref. 15 as "\*59 trivittatus, n. Arkansaw? praepotens, n." [name apparently substituted later and used in Schönherr (1835: 62)].

Interpretations. Germar (in Schönherr, 1834a: 222) redescribed the species based on the specimen received from Say. Le-Conte (in LeConte and Horn, 1876: 148) provided a key to the North American species, and Anderson (1987: 536) designated a neotype from the LeConte Collection in this sense. It should be noted that Say (1832b: 21) inadvertently redescribed *C. trivittatus* as *Rhynchophorus praepotens* without mention of the senior name, which prompted a series of speculations in the literature (see further below under that name).

Extant Types. Say mentioned in the description an earlier submission to the Journal of ANSP. This indicates that the description was prepared long before the printing of the Curculionites pamphlet, and very likely before his departure from Philadelphia in November 1825. Therefore, the specimen sent to Germar (MLUH, drawer 9/2/9) should be regarded as one of the two or three syntypes mentioned in the description. A second syntype in drawer 107 of the Schönherr Collection (NHRS) is labeled "L. praepotens/ Civit: Foeder:/ America bor./ Say."

Notes. I here designate the above-mentioned specimen in the Sehönherr Collection as the lectotype for *C. trivittatus* and, under ICZN Article 75.8, set aside the neotype of Anderson (1987). The two specimens represent the same species.

## Hypsonotus alternatus Say, 1832b: 10

Modern Name. Trichalophus alternatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. North West Territory [stated in description and Ref. 15]. The known distribution of this species makes it possible that Say referred to the "North-Western Territory" (NW of Rupert's Land). Alternatively, he might have collected the specimen along the western edge of the "Territory Northwest of the River Ohio" in 1823, but I am unaware of any collecting records from today's Minnesota-Dakota border region.

Exchange of Specimens. Say sent Schönherr one specimen as "\*9 alternata, n. N.W. Terr.'." (Ref. 15).

Interpretations. Say's holotype was redescribed as Alophus alternatus Boheman, 1834, because, at the time of writing, Boheman and Sehönherr were unaware of Say's Curculionites pamphlet. Mannerheim (1843: 290) applied the name to this and a second species, later described as Trichalophus didymus LeConte, 1854. Bright and Bouchard (2008: 59) considered A. seriatus Mannerheim, 1853, as a junior subjective synonym.

Extant Types. The holotype (asterisk on Say's list) is in drawer 191 of the Sehönherr Collection (NHRS), with Sehönherr's handwritten label "G. alternatus/ Say./ Amer. bor:/ Say." Bright and Bouehard (2008) designated a neotype from the LeConte Collection (MCZ).

Notes. I consider the above-eited specimen in the Sehönherr Collection as the holotype and, under Artiele 75.8, set aside the neotype of Bright and Bouchard (2008). The holotype agrees with the eurrent interpretation of the species.

## Listroderes squamiger Say, 1832b: 11

Modern Name. Listronotus squamiger (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansa [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "69 squamiger, n. Arkansaw" (Ref. 15).

Interpretations. The name is being used in the sense of Henderson (1939: 253). This author designated a neotype for L. squamiger, recognized Listroderes inaequalipennis Boheman, 1842, as a junior subjective synonym, and fixed L. squamiger as the type species for Listronotus Jekel, 1865.

Extant Types. A female syntype is in drawer 191 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "C. squamiger/ Say./ Amer. bor. Say." The neotype designation by Henderson (1939) is set aside here under Article 78.5.

#### Listroderes porcellus Say, 1832b: 11

Modern Name. Listronotus porcellus (Say).

*Origin of Specific Name*. Proposed by Say.

Type Locality. United States [stated in description]; Missouri [stated in Schönherr (1834a: 284), but no locality given in Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "\*78 porcellus, n." (Ref. 15).

Interpretations. The name is being used in the sense of Dietz (1889: 51).

Extant Types. The holotype (asterisk on Say's list) is in drawer 191 of the Schönherr Collection (NHRS), with Schönherr's labels "porcellus./ Say./ Missuri. Say." and "83/55."

## Listroderes sparsus Say, 1832b: 11

Modern Name. Listronotus sparsus (Say). Origin of Specific Name. Curculio sparsus; Knoch (in Melsheimer, 1806: 31).

Type Locality. Missouri [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "84 sparsus, n. Missouri" (Ref. 15).

Interpretations. One of Say's syntypes was redescribed as Listroderes sparsus Gyllenhaal, 1834, because, at the time of writing, Gyllenhaal and Schönherr were unaware of Say's Curculionites pamphlet. For the same reason, Gyllenhaal (in Schönherr, 1834a: 281) redescribed one of Say's syntypes of Listroderes lineatulus as Listroderes squalidus. Melsheimer (1853: 96) treated L. squalidus as a junior synonym of L. sparsus Say but listed L. lineatus/L. lineatulus Say as valid (see under next species below). O'Brien and Wibmer (1982: 4) synonymized four other names with L. sparsus. The current usage of the name is that of Dietz (1889: 43) and Stockton (1963: 148).

Extant Types. In drawer 191 of the Schönherr Collection (NHRS) is one syntype with the labels "sparsus./ Say./ Missouri. Say" and "86/55."

#### Listroderes lineatulus Say, 1832b: 11

Modern Name. Listronotus sparsus (Say). Origin of Specific Name. Modification of Curculio lineatus; Melsheimer (in Melsheimer, 1806: 30).

Type Locality. Not stated in description. Exchange of Specimens. Say sent Schönherr one specimen as "(649) 100 lineatulus, n." (Ref. 15). He had used Melsheimer's manuscript name before as "100 Curculio lineatus nob. Mss." in Ref. 7. Harris sent Schönherr one specimen as "56 Listroderes lineatulus, S." (Ref. 24) which is the one mentioned in Schönherr (1842: 195).

Interpretations. One of Say's syntypes of Listroderes lineatulus was redescribed as Listroderes squalidus Gyllenhaal, 1834, because, at the time of writing, Gyllenhaal and Schönherr were unaware of Say's Curculionites pamphlet. Melsheimer (1853: 96) treated L. squalidus as a junior synonym of L. sparsus Say but listed its objective senior synonym as a valid species with the names L. lineatus and L. ?line-

atulus. Likewise, LeConte (in LeConte and Horn, 1876: 136) treated *L. lineatulus* (under *Macrops* Kirby) as a valid name. Dietz (1889: 53) considered *L. lineatulus* and *L. squalidus* as junior synonyms of *L. sparsus* (under *Macrops*).

Extant Types. One syntype is in drawer 191 of the Schönherr collection (NHRS) under L. sparsus with the labels "sparsus Boh/ (not spercus)," "lineatulus./ Say./ Am. bor. Say.," and "186/ 36." I was unable to reeognize in the Harris Collection the specimen [and likely syntype] identified by Say in 1825 (Ref. 7). It is unclear if this was the specimen Harris sent to Sehönherr.

#### Barynotus rigidus Say, 1832b: 11

Modern Name. Phyxelis rigidus (Say). Origin of Specific Name. Proposed by Say.

Type Locality. Connecticut [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "\*117 rigidus, n. Connectieut" (Ref. 15).

Interpretations. Blatehley (in Blatehley and Leng, 1916: 106 ff.) published the last key, described one new species of *Phyxelis* Sehönherr, 1842, and proposed two synonymies. Anderson and Howden (2002: 61) stated that they are aware of two described and two undescribed North American species. Bright and Bouchard (2008: 269) synonymized P. latirostris Blatehley, 1916, with *P. rigidus*, so the latter name is applied now to an apparently widespread species with eurrently four junior synonyms. All nomenelatural action by North American entomologists were made without having seen the types of four of the currently five available species names which are housed in three European museums.

Extant Types. The holotype (asterisk on Say's list) is in drawer 98 of the Schönherr Collection (NHRS). It bears a small, handwritten [apparently not in Schönherr's hand] label "Amer. bor." that also occurs

on Agraphus bellicus Say, Barynotus erinaceus Say, and Peritelus chrysorrhoeus Say.

#### Barynotus erinaceus Say, 1832b: 12

Modern Name. Panscopus erinaceus (Say).

*Origin of Specific Name*. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "=119 erinaeeus, n. [apparently added later:] (Gnathorus)" (Ref. 15).

Interpretations. Spanton and Anderson (2016: 16) designated Sehönherr's specimen as the lectotype, which agrees with the general usage of the name since LeConte and Horn (1876: 42).

Extant Types. The only known syntype, now the leetotype, is in drawer 193 of the Sehönherr Collection (NHRS), with the handwritten label "Am. bor."

### Barynotus granulatus Say, 1832b: 12

Modern Name. Anametis granulata (Say). Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. Pierce (1907: 253) seems to have been the first to include B. granulatus in Anawetis Horn, 1876. Somewhat later, Pierce (1913: 382) synonymized with A. granulata the other two available nominal species, i.e., A. grisea Horn, 1876, and A. subfusca Fall, 1907. Blatchley (in Blatchley and Leng, 1916: 103) speculated that the true A. granulata might be A. setosa Blatchley, 1916 (now in Dichoxenus Horn, 1876), so that in this case, A. grisea would become the valid name for A. granulata in the sense of Pierce.

Extaut Types. The only known syntype is in the MCZ Say Collection (Mawdsley, 1993: 167). It has Say's handwritten label

"granula-/ tus, S." with his characteristic checkmark in the lower right corner.

#### Lepyrus geminatus Say, 1832b: 12

Modern Name. Lepyrus palustris (Scopoli, 1763).

Origin of Specific Name. Proposed by Say.

Type Locality. Louisiana and Missouri [stated in description].

Exchange of Specimens. None known.

Interpretations. The genus is difficult taxonomically because of Holarctic distribution, geographical variation, and problematic access to type material. Several senior species names had been misinterpreted until the end of the 19th century. Hamilton (1896: 122) synonymized the North American L. geminatus with the European L. palustris, and his view generally has been accepted in the subsequent literature, although subtle morphological differences are acknowledged.

Extant Types. None known. I found no evidence in Say's correspondence that the Louisiana type came from or was returned to Barabino, the collector of numerous beetle species described from there at approximately the same time (Say, 1831a, 1832a).

#### Phytonomus trivittatus Say, 1832b: 12

Modern Name. Hypera trivittata (Say). Origin of Specific Name. Proposed by Say.

Type Locality. North West Territory [stated in description and Ref. 15]. Based on available distribution data, the term may refer either to the Territory northwest of the River Ohio or to the North-Western Territory, a historical region northwest of Rupert's Land.

Exchange of Specimens. Say sent Schönherr one specimen as "\*10 trivittata, n. N.W. Terr"." (Ref. 15). However, there is no reference to it in Schönherr (1834b, 1842).

Interpretations. The name remained doubtful until Titus (1911: 428) used it as a senior synonym for *Phytonomus setigerus* LeConte, 1876.

Extant Types. None known. I was unable to find the holotype (asterisk on Say's retained list) in the Schönherr Collection (NHRS).

#### Phytonomus comptus Say, 1832b: 12

Modern Name. Hypera (Eririnomorphus) rumicis (Linné, 1758).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "\*53 comptus, n." (Ref. 15).

Interpretations. Gyllenhaal (in Schönherr, 1834b: 384) described Say's holotype under the same name because, at the time of writing, he and Schönherr were unaware of the Curculionites pamphlet. LeConte (in LeConte and Horn, 1876: 125) interpreted *P. comptus* along with seven other North American species in a key, considered P. diversus Gyllenhaal, 1834, as a subjective junior synonym, and noted that P. comptus belongs to the subgroup *Eririnomorphus* Capiomont, 1868. Champion (1902a: 2) considered P. comptus a subjective synonym of Hypera rumicis (Linné, 1758), which Buchanan (1923: 280) in turn considered a distinct species not found in North America before 1912. Titus (1911: 416), in his revision of the North American species, followed LeConte and Horn (1876) but did not use Capiomont's genus group names. Skuhrovec (2013: 432) maintained P. comptus Say and P. comptus Gyllenhaal as subjective junior synonyms of Hypera (Eririnomorphus) rumicis.

Extant Types. The holotype (asterisk on Say's list) is in drawer 196 of the Schönherr Collection (NHRS), with Schönherr's hand-

written label "Ph: comptus/ Say./ Am. bor. Say."

### Peritelus chrysorrhaeus Say, 1832b: 13

Modern Name. Cercopeus chrysorrhoeus (Say).

Origin of Specific Name. Curculio chrysorrhoeus; Melsheimer (in Melsheimer, 1806: 30).

Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "(654) 6\* chrysorrhoeus, n." (Ref. 15).

Interpretations. This is the type species of Cercopeus Schönherr, 1842, and, among the 17 currently recognized species (O'Brien et al., 2010), the only one described before 1955. Sleeper (1955: 288) was the first to describe further congeners, thereby attempting to fix the identity of Say's species. He did not explain his selection of a neotype but it is possible that he used identified specimens of historical collections. O'Brien et al. (2010: 7) relied on the prevailing perception about the species' identity because the neotype in Sleeper's private collection was inaccessible.

Extant Types. In drawer 98 of the Schönherr Collection (NHRS) stands a specimen with a small, handwritten label "Amer. bor." This is the holotype of *P. chrysorrhaeus* Say (asterisk on Say's list) and *P. chrysorhoeus* [sic] Boheman, 1834 (an objective junior synonym). ICZN Article 75.8 applies, and the neotype designated by Sleeper (1955: 288) is set aside.

Notes. O'Brien and Wibmer (1982: 52) emended the original spelling of the specific name from "chrysorrhaeus" to "chrysorrhoeus." Technically this was an unjustified emendation because incorrect transliterations and improper latinizations are not to be considered inadvertent errors (ICZN 1964, Article 32.a.ii). However, because of prevailing usage [the original spelling has been used only in Say (1832) and LeConte

(1859: 274)] and attribution of the name to the original publication, "chrysorrhoeus" is to be maintained in accordance with Article 33.2.3.1 (ICZN 1999).

## Peritelus (Agraphus) bellicus Say, 1832b:

Modern Name. Agraphus bellicus (Say). Origin of Specific Name. Proposed by Say.

Type Locality. Florida [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "\*68 bellulus, n. Florida — [added later:] bellicus, n." (Ref. 15).

Interpretations. The species name is being used in the sense of Horn (in LeConte and Horn, 1876: 59).

Extant Types. The holotype (asterisk on Say's list) is in drawer 105 of the Schönherr Collection (NHRS). It has a small, handwritten label "Am. bor." This specimen is also a syntype of Agraphus leucophoeus Gyllenhaal, 1834, a former Dejean manuscript name used by Schönherr and Gyllenhaal (in Schönherr, 1834b: 641) because they were unaware of Say's description. Say (1832b) mentioned the synonymy in the description, evidently based on (unpreserved) information obtained from Schönherr (Ref. 18).

#### Lixus marginatus Say, 1832b: 13

Modern Name. To be determined.

Origin of Specific Name. Say states in the description that he substituted Lixus impressus Say ms with L. marginatus because of homonymy with L. impressus Sahlberg, 1826.

Type Locality. Lower Missouri River and Atlantic States [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "15 Lixus impressus, nob. X" (Ref. 10) and Schönherr one specimen as "64 impressus, n." (Ref. 15).

Interpretations. LeConte and Horn (1876: 431), Csiki (1934: 121), Kingsolver (1972: 153), and O'Brien and Wibmer (1982: 77) considered L. marginatus a nomen dubium. Casey (1891: 202) speculated that LeConte (in LeConte and Horn, 1876: 156) misinterpreted L. sylvius Boheman, 1843, and that the misidentified species might be L. marginatus. Anderson (1993: 232) mentioned that authors confused L. punctinasus LeConte, 1876, with L. marginatus, L. musculus Say, 1832b, or both.

Extant Types. One syntype of L. marginatus is in drawer 108 of the Schönherr Collection (NHRS) under L. impressus. Drawer 9/2/10 of the Germar Collection (MLHU) may contain specimens received from Say in 1828 as L. impressus, but I was unable to recognize any. Taschenberg (1869: 179) listed "L. impressus Germar" in synonymy with L. concavus Say, with provenance Illinois and Tennessee.

Notes. Lixus marginatus Say is preoccupied by L. marginatus Beck, 1817. The valid name for Say's species needs to be determined in a revisionary study.

## Lixus concavus Say, 1832b: 14

Modern Name. Lixus concavus Say.

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "111 concavus, n. Indiana — resembles impressus, n." (Ref. 15) and Klug three specimens as "Lixus concavus, Say" (Ref. 17). Harris sent Schönherr one specimen as "63 Lixus 471 Alabama (907) [later added behind Lixus:] concavus, Say" (Ref. 24).

Interpretations. The name is being used in the sense of Casey (1891: 203). He and Kingsolver (1972: 151) synonymized a total of four nominal species with L. concavus

but they did not explain how they identified Say's species without type material.

Extant Types. One syntype is in drawer 107 of the Schönherr Collection (NHRS) and three more in MfN. The specimens reported by Dejean (1835: 272, 1836: 296) and Taschenberg (1869: 179) show no evidence for being syntypes.

#### Lixus lateralis Say, 1832b: 14

Modern Name. Lixus scrobicollis Boheman, 1835.

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansaw [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "65 lateralis, n. Arkansaw" (Ref. 15).

Interpretations. Boheman (in Schönherr, 1835: 84) described L. lateralis Say as L. scrobicollis without explaining why he suppressed the more senior name. Subsequent authors (e.g., Taschenberg, 1869: 179; LeConte and Horn, 1876: 159; Casey, 1891: 207; Csiki, 1934: 123; Kingsolver, 1972: 153; O'Brien and Wibmer, 1982: 77) either maintained this synonymy or considered L. lateralis an unrecognized name.

Extant Types. One syntype of L. lateralis is preserved in drawer 108 of the Schönherr Collection (NHRS). A second syntype is in the MCZ Say Collection (Mawdsley, 1993: 168); it has the same number on the label (Prena, 2015, fig. 3), under which the above specimen was sent to Schönherr.

Notes. Lixus lateralis Say, 1832b, is a junior secondary homonym of Curculio lateralis Panzer, 1789; a junior primary homonym of L. lateralis Klug, 1829, and L. lateralis Stephens, 1831; a senior primary homonym of L. lateralis Brisout, 1866; and an objective synonym of L. scrobicollis Boheman, 1835. Kingsolver (1972: 152) considered L. sylvius Boheman, 1842, a subjective junior synonym of L. scrobicollis, the presently valid name for L. lateralis Say.

However, Gültekin (2013: 107; personal communication) recognized *L. binotatus* Boheman, 1835, as the valid name for *L. sylvius* and as being distinct from *L. scrobicollis*.

#### Lixus musculus Say, 1832b: 14

Modern Name. Lixus musculus Say.

Origin of Specific Name. Proposed by Say.

Type Locality. Louisiana [stated in description].

Exchange of Specimens. None known.

Interpretations. Lixus musculus was considered by LeConte (in LeConte and Horn, 1876: 158) as the valid name for L. calandroides Randall, 1838; by Casey (1891: 202) and Champion (1902b: 107) as the valid name for L. punctinasus LeConte, 1876; and by Schönherr (1835: 94), Kingsolver (1972: 153), and O'Brien and Wibmer (1982: 77) as a nomen dubium.

Extant Types. The only known syntype of L. musculus is in the Harris Collection (MCZ). It bears Say's handwritten label "muscu/ -lus/ nob./ Barabi/ -no" with his characteristic checkmark. The four specimens in the Germar Collection (MLUH) listed by Taschenberg (1869: 179) are not syntypes.

#### Erirhinus mucidus Say, 1832b: 14

Modern Name. Dorytomus mucidus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. None stated in description. Cape Girardeau, Missouri [Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "110 mucidus, n. [added later:] Cape Gerardeau" (Ref. 15).

Interpretations. The name is being used in the sense of LeConte (in LeConte and Horn, 1876: 164). O'Brien (1970: 47) noted in his revision of the North American species that *D. mucidus* in the prevailing

sense is very similar to *D. brevisetosus* Casey, 1892.

Extant Types. One syntype is in drawer 115 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "Rh. mucidus/ Say./ Am. bor. Say."

### Anthonomus quadrigibbus Say, 1832b: 15

Modern Name. Anthonomus quadrigibbus Say.

Origin of Specific Name. Curculio quadrigibbus; Melsheimer (in Melsheimer, 1806: 28).

Type Locality. United States [stated in description]; Pennsylvania [on Schönherr's syntype].

Exchange of Specimens. Say sent Germar at least one specimen as "22 Rynchaenus quadrigibbus, nob." (Ref. 10) and Schönherr one specimen as "(595 [error for 598]) 26 quadrigibbus, n." (Ref. 15), upon which Schönherr replied, "26. quadrigibbus. Sayi. — Anthonomus id". nob." (Ref. 19).

Interpretations. The species name has been used consistently since the 1860s for a species known as the apple curculio, or four-humped curculio (e.g., Walsh, 1867b: 80; Riley, 1871: 29; LeBaron, 1874: 140).

Extant Types. One syntype is in drawer 117 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "quadrigibb./ Pensylvan. Say." Two pointmounted specimens in drawer 9/2/14 of the Germar Collection (MLUH) are not recognizable as syntypes but might have been remounted. ICZN Article 75.8 applies, and the neotype designated by List (1932: 13) is set aside.

## Anthonomus musculus Say, 1832b: 15

Modern Name. Anthonomus musculus Say.

Origin of Specific Name. Proposed by Say for Curculio varians; Melsheimer (in Melsheimer, 1806: 29).

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "29■ musculus, n." (Ref. 15), upon which Schönherr replied, "29. musculus. Sayi. — Anthonomus id<sup>m</sup>." (Ref. 19).

Interpretations. The species name is being applied to the cranberry weevil, a pest of blueberries and cranberries in North America. This interpretation rests to a great deal on the identifications of LeConte (in LeConte and Horn, 1876: 200) and Dietz (1891: 216), with subsequent controversies about the distinctness of A. sulcifrons LeConte, 1876 (e.g., Fall, 1913: 48; Blatchley in Blatchley and Leng, 1916: 302; Leng, 1920: 323). In the early literature, the name was used occasionally for the strawberry bud weevil, Anthonomus signatus Say, 1832. Riley (1885: 281) was in doubt whether the morphological criteria employed by Le-Conte sufficed to distinguish two species.

Extant Types. Say described more than one specimen, including a dark variety. One syntype is in drawer 117 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "musculus Say./ Pensylvania. Say."

# Anthonomus (Odontopus) calceatus Say, 1832b: 15

Modern Name. Odontopus calceatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "■85 calceatus, n." (Ref. 15).

Interpretations. The name has been used consistently in the sense of LeConte (in LeConte and Horn, 1876: 210) for the only species of *Odontopus* Say, 1832, known to occur in the United States. Gyllenhaal (in Schönherr, 1835: 361) described a syntype

of A. calceatus under the name Prionomerus carbonarius.

Extant Types. One syntype is in drawer 118 of the Schönherr Collection (NHRS) under *Prionomerus carbonarius*. Another likely syntype is preserved in the MCZ Say Collection (Mawdsley, 1993: 168), with the label "Anthonomus/ Odontopus, S./ calceatus, S." (Prena, 2015, fig. 3).

#### Erodiscus myrmecodes Say, 1832b: 15

Modern Name. Myrmex myrmex (Herbst, 1797).

Origin of Specific Name. Curculio myrmecodes; Knoch (in Melsheimer, 1806: 31); with checkmark in Say's copy and note, "Calandra."

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "(668) \*49 myrmecodes, n." (Ref. 15).

Interpretations. Gyllenhaal (in Schönherr, 1835: 366) treated Curculio myrmex Herbst, 1797; Erodiscus myrmecodes Say, 1832b; and Otidocephalus americanus Chevrolat, 1833, as synonyms of a single species for which he used the name O. americanus. Horn (1873: 450) established nomenclatural priority (as Otidocephalus myrmex) and provided a key to seven nominal species known to him from the United States (representing six of the presently 35 recognized species placed in three genera). Because of secondary homonymy with E. myrmecodes Say, he also proposed Otidocephalus chevrolatii as a new name for O. myrmecodes Chevrolat, 1833. The latter action was rejected by Casey (1892b: 435).

Extant Types. The specimen sent to Schönherr is in drawer 116 (NHRS) under Otidocephalus americanus, with the label "Amer: bor.?/ Say." The Melsheimer Collection (MCZ) houses a specimen that appears to have a label written by Say.

Notes. Curculio myrmecodes was relatively widely known as a manuscript name in Europe. Say (1832b) and Chevrolat (1833) used it in valid descriptions, each time for a species generally known as M. myrmex (Herbst) [judging from Say's and Chevrolat's type specimens in NHRS]. Otidocephalus myrmecodes Chevrolat, 1833, and its replacement name O. chevrolatii Horn, 1873, are synonyms of M. myrmex (Herbst, 1797) (new synonyms). A revision is necessary to fix the identity of M. myrmex (Herbst) and to determine the valid name for M. myrmecodes in the sense of Horn (1873).

#### Balaninus nasicus Say, 1832b: 16

Modern Name. Curculio proboscideus Fabricius, 1775; **new synonym**.

Origin of Specific Name. Proposed by Say.

Type Locality. Pennsylvania [stated in description]; North America and Boston [on labels of Schönherr's syntypes].

Exchange of Specimens. Say sent Schönherr apparently two specimens as "(576) 21\* nasicus, n." (Ref. 15).

Interpretations. Say (1832b) used the name for C. nucum in the sense of Melsheimer (1806: 27), i.e., for a widespread North American species initially mistaken for the European hazelnut weevil. Harris (1841: 65) applied the name to what he called "the most common of the nut weevils known to me." Horn (1873: 460) synonymized Balaninus nasutus Say, 1832b; B. rostratus Gyllenhaal, 1835; and B. sparsus Gyllenhaal, 1835, with B. nasicus, which he distinguished from five other nominal species in a key. Hamilton (1890: 4) provided details about the biology and distribution of B. nasicus but, according to Patton (1897: 76), confused it with another species, B. obtusus Blanchard, 1884. Champion (1903: 279) used the name for a specimen from Puebla, Mexico. Chittenden (1927: 150) interpreted B. nasicus in the

sense of *B. auctus* Casey, 1910. Gibson (1969: 269) applied the name to a widespread eastern species and considered *B. auctus* and *B. ordinatus* Casey, 1910, as junior subjective synonyms.

Extant Types. In drawer 118 of the Schönherr Collection (NHRS) is a specimen with the labels "&," "Nasicus. Say/ Amer. bor./ Say.," "110/ 64," and "Curculio caseyi (Chttn)/ Det. by Lester P. Gibson." A second specimen is labeled "\$," "N. Am./ Boston/ H. T.," "111/ 64," and "Curculio proboscideus Fab./ Det. by Lester P. Gibson." Gibson (1969: 269) designated a neotype from Grove City, Pennsylvania.

Notes. Gyllenhaal (in Schönherr, 1835: 377) wrote that Say provided a male and a female specimen. This contradicts my interpretation that asterisks on Say's list denote singletons. However, the label on the female from Boston bears a reference to Harris but not to Say. My only explanation is that Say must have included in the shipment one of Harris' specimens, particularly as this identification appears shortly afterward in Harris (1833: 578). I found no indication that Harris mailed specimens to Schönherr before 1836. Because the neotype designation by Gibson (1969) cannot be upheld, I resurrect here C. auctus (Casey, 1910) as the valid name for *C. nasicus* of authors (not Say, 1832b), with B. ordinatus Casey, 1910, maintained as a junior subjective synonym. Furthermore, I designate the female specimen from Boston as the lectotype for B. nasicus, thereby making B. nasicus Say, 1832, a junior subjective synonym of C. proboscideus Fabricius, 1775 (new synonym). This action protects the currently used name C. monticola (Casey, 1887) for a Central American species that ranges into the southern United States.

## Balaninus rectus Say, 1832b: 16

Modern Name. Curculio proboscideus Fabricius, 1775. Origin of Specific Name. Proposed by Say.

Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "22\* rectus, n." (Ref. 15).

Interpretations. Gyllenhaal (in Schönherr, 1835: 375) described the holotype of B. rectus as Balaninus rectirostris. Horn (1873: 459) mistook B. rectus and B. rectirostris for a species now known as C. sayi (Gyllenhaal, 1835) and described the true B. rectus as B. quercus. Casey (1910: 111) considered B. rectus in the sense of Horn (1873) as a misidentification of an undescribed species he named B. auriger. Chittenden (1927: 153) treated B. rectus as the valid name for seven nominal species group taxa, among them B. rectirostris and B. quercus. Gibson (1969: 278) eventually synonymized B. rectus with C. proboscideus Fabricius and B. auriger (= B. rectus auctt.)with C. sayi.

Extant Types. The holotype (asterisk on Say's list) is in drawer 118 of the Schönherr Collection (NHRS). Gibson (1969) recognized the specimen as the holotype of B. rectirostris Gyllenhaal and implied subjective (rather than objective) synonymy with B. rectus. The specimen is labeled "Typus," "rectus Say/ Amer. bor./ Say.," "109/ 64," and "Curculio proboscideus Fab./ Det. by Lester P. Gibson."

### Balaninus nasutus Say, 1832b: 16

Modern Name. Curculio proboscideus Fabricius, 1775.

Origin of Specific Name. Proposed by Say.

Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr two specimen as "24■ nasutus, n. (Arkansaw) & the ♀? from Pennsylv<sup>a</sup>." (Ref. 15).

Interpretations. Say (1832b) described the species from Pennsylvania and noted that Schönherr had suggested to him the name "rostratus." Gyllenhaal (in Schönherr, 1835: 374) subsequently described the two specimens received from Say with Schönherr's name, as Balaninus rostratus Gyllenhaal, one of them not being from Say's type locality. Melsheimer (1853: 92) and Gemminger and Harold (1871: 2497) gave B. rostratus priority over B. nasutus without stating the reason [B. nasutus Say is a secondary junior homonym of Curculio nasutus Fabricius, 1781, and C. nasutus Olivier, 1791]. Otherwise, the two names have not been interpreted in the early literature, so there was no confusion with any of their numerous homonyms. Gibson (1969: 278) accepted Say's female specimen from Pennsylvania (NHRS) as the holotype of B. nasutus Say and considered B. nasutus and B. rostratus as junior subjective synonyms of C. proboscideus Fabricius.

Extant Types. The female holotype of B. nasutus from Pennsylvania (Gibson 1969) is in drawer 118 of the Schönherr Collection (NHRS). This specimen together with the male from Arkansaw next to it are syntypes of B. rostratus Gyllenhaal. The female bears the labels "2," "Typus," "Nasutus. Say/ Amer. bor./ Say.," "106/64," and "Curculio proboscideus Fab./ Det. by Lester P. Gibson." The male bears the labels "る," "Allotypus," "Nasutus. Say," "Amer. bor./ Say.," "107/ 64," and "Curculio caryae (Horn)/ Det. by Lester P. Gibson." The printed type labels were attached routinely by museum staff based on the literature (R. Malaise, in litt., cited by Smreczyński 1959: 644), not by Gibson.

Notes. Say noted on his retained list that "nasutus" is from Arkansaw and the female from Pennsylvania. Although not obvious, it seems he crossed out the asterisk. The locality given in the description makes the female specimen in the Schönherr Collection the holotype of *B. nasutus* Say; the Arkansaw specimen may be rejected as a

syntype for formal reasons, but Say obviously considered it conspecific. Because *B. rostratus* is an available name for *B. caryae* Horn, 1873 (ICZN Article 59.2), I here designate the female specimen from Pennsylvania as the lectotype for *B. rostratus*. This makes *B. rostratus* an objective junior synonym of *B. nasutus* Say and a subjective junior synonym of *C. proboscideus* as intended by Gibson (1969). The long-standing usage of *B. caryae* thus remains unaffected.

# Tylomus lineaticollis var. palmicollis Say, 1832b: 16

Modern Name. Rhyssomatus palmicollis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated on page 27, under C. palmacollis].

Exchange of Specimens. Say sent Schönherr one specimen as "\*94 palmacollis, n. allied to lineolicollis, n. but the punctures of elytra are larger, looks small?" (Ref. 15), whereupon Schönherr responded, "94. palmacollis Sayi — Cryptorhynchus id"." (Ref. 19).

Interpretations. The name is being used in the sense of Horn (1873: 464), who redescribed the species and published a key.

Extant Types. The holotype (asterisk on Say's list) is in drawer 141 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "palmacollis/ Say./ Missuri. Say."

Notes. The brief description under Tylomus lineaticollis on page 16 has date priority (May 1832) over the description of Cryptorhynchus palmacollis [sic] on page 27 in the supplement (December 1832). Horn (1873) referred to both pages and used the more junior spelling "palmacollis." Leng (1920: 332) referred to page 16 but used the spelling of page 27. However, the two names are not alternative spellings (not

published simultaneously) and inappropriate connecting vowels are not to be considered as inadvertent errors (ICZN Article 32.5.1). Because *R. palmacollis* is not a frequently used name in the sense of Article 23.9, I preserve the senior name with its original spelling. *Rhyssomatus palmicollis* is an objective synonym of *R. palmacollis* (an asterisk on Say's list indicates that it was a singleton).

#### Orchestes ephippiatus Say, 1832b: 16

Modern Name. Tachyerges ephippiatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. There are two species of Tachyerges Schönherr, 1825, with a conspicuous color pattern in North America. Horn (1873: 461) applied the name to the one with reddish legs. This generally was accepted in the subsequent literature although there was at least one confusion with the other species, T. salicis (Linné, 1758), by Fall (1901: 196). Anderson (1989: 262) selected a neotype to fix the prevailing usage.

Extant Types. None known. Anderson (1989) designated a neotype from the J. L. LeConte Collection (MCZ).

## Orchestes pallicornis Say, 1832b: 16

Modern Name. Orchestes pallicornis Say. Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. The name O. pallicornis had been applied to a number of species until Anderson (1989) revised the North American Ramphini. He was the first to clearly differentiate between two common but widely confused sibling species: one

being associated with Rosaceae, the other with Betulaceae and Ulmaceae. Because Anderson considered the type material of *O*. pallicornis as being lost, he designated a neotype and applied the name to the species associated with Rosaceae, known in the economic literature as apple-flea weevil.

Extant Types. One female syntype of O. pallicornis is preserved in the Say Collection (MCZ). The specimen has been dissected by me and then remounted on a point, with the empty original card left underneath. Anderson (1989: 238) designated a neotype from Stouffville, Ontario.

Notes. Say (1832b) wrote that the species is very abundant and includes an unnamed variety with piceous legs. I located only one syntype but there may be more in WMI or European collections. The MCZ specimen is the species known to be associated with Betulaceae and Ulmaceae, called O. mixtus Blatchley, 1916, by Anderson (1989), not the apple-flea weevil. Because of this and a number of recent introductions and nomenclatural changes, the North American Rhamphini require another taxonomic update.

#### Baridius trinotatus Say, 1832b: 17

Modern Name. Trichobaris trinotata

Origin of Specific Name. Curculio trinotatus; Melsheimer (in Melsheimer, 1806:

Type Locality. Indiana and Pennsylvania [stated in description].

Exchange of Specimens. Say sent German at least one specimen as "28 Rynchaenus trinotatus, nob. X" (Ref. 10) and Schönherr one specimen as "(601) 35 trinotatus, n." (Ref. 15).

Interpretations. Barber (1935: 8) designated two [!] neotypes for *B. trinotatus* from the Casey Collection and fixed this species as the type species for Trichobaris LeConte. His concept of B. trinotatus had been, and still is, in prevailing use.

Extant Types. Because it is unknown when Say wrote the description based on which specimens, I do not consider as syntypes the specimens exchanged until the late 1820s, even though the description mentions Pennsylvania as a type locality. One syntype, with original Say label, is preserved in the Say Collection (MCZ), another one is in drawer 129 of the Schönherr Collection (NHRS). The latter is labeled with the collecting site "Mississippi," a locality not mentioned in the description or on Say's retained list (Ref. 15). It is possible that Schönherr misinterpreted the dash behind the name as a ditto mark and erroneously applied the locality of another species from above [see also Falciger quadrispinosus]. Barber's neotype designations are invalid, because he failed to designate a single specimen.

#### Baridius undatus Say, 1832b: 17

Modern Name. Onychobaris undata (Say); **new combination**.

Origin of Specific Name. Proposed by

Type Locality. Mexico [stated in description and Ref. 15]; probably vicinity of Mexico City (Barber, 1928).

Exchange of Specimens. Say sent Schönherr two specimens as "113 undatus, n. Mexico" (Ref. 15), whereupon Schönherr replied, "113. undatus Say. — Baridius id<sup>in</sup>." (Ref. 19).

Interpretations. The original series contained a typical form ("over one fifth of an inch") and a small, shiny variety ("less than three twentieths of an inch"). Boheman (in Schönherr, 1836: 681) included the small variety under *Baridius crenatus*, a former manuscript name proposed by Klug. The typical form was treated two pages later as a good species, with its original name and author. In his annotated compilation of Say's publications, LeConte (1859) misspelled *B. undatus* as *B. undulatus*, both being available names for two distinct species on page 17 of the original. Later authors generally meant to refer to B. undatus Šay, 1832, rather than Rhynchaenus undulatus Say, 1824 [=Madarellus], when they cited B. undulatus [sic] of the Pseudobaris LeConte, 1876, complex. Champion (1909a: 440) applied the name B. undatus [as B. undulatus] to Say's small variety and used it as the senior name for a species of *Pseudobaris* that included also *B*. crenatus Boheman, 1836; B. depilis Boheman, 1836; Pseudobaris costaricensis Solari and Solari, 1906; and a specimen received under the name B. subscabrosus Boheman. 1836. Champion noted that the latter does not agree with Boheman's description and that he cannot offer a generic placement for the specimen standing under B. undatus [i.e., Say's typical form]. Casey (1922: 441) designated *Pseudobaris undulatus* [actually the varietal form of *P. undatus*] as the type species for *Craptidia* Casey, 1922, a newly proposed subgenus of *Pseudobaris*. Hustache (1938: 31) erroneously considered Craptidia as a subgenus of Craptus Casey, 1922 [Casey (1922) had named it in a paragraph on *Craptus* but clearly referred to *Pseudobaris*], thereby accidentally creating the combination Craptus undulatus which proliferated in the subsequent literature.

Extant Types. One specimen each of the typical and the deviant form are in drawer 128 of the Schönherr Collection (NHRS), with the deviant form under Baridius crenatus.

Notes. The typical form of *B. undatus* is a species of *Onychobaris* LeConte, 1876. It has the right size and fits the contemporary concept of *Baridius*, and there was no other species on Say's list with which it could have been confused. The deviant form, as recognized by Boheman (in Schönherr, 1836) and Champion (1909a), is conspecific with *B. crenatus*. Because Say distinguished between a typical form and a variety, the name has to be applied to Say's typical form. *Pseudobaris crenata* (Boheman, 1836) is

resurrected here from synonymy with *B. undatus*, as the valid name for Say's varietal form. *Baridius depilis* and *B. costaricensis* remain in synonymy with *P. crenata. Craptidia* Casey, 1922, is based on a misidentified (and misspelled) type species. The next revising author of any of the approximately 10 involved nominal genera needs to fix the type species under the provisions of ICZN Article 70.3.

#### Baridius striatus Say, 1832b: 17

Modern Name. Baris striata (Say).

Origin of Specific Name. Curculio striatus; Melsheimer (in Melsheimer, 1806: 29).

Type Locality. United States [stated in description].

Exchange of Specimens. None known.

Interpretations. The name is being used in the sense of LeConte (1869: 362), who was the first to include *B. striata* in a key.

Extant Types. One pinned specimen without locality data is preserved in the MCZ Say Collection (Mawdsley, 1993: 168).

### Baridius transversus Say, 1832b: 18

Modern Name. Baris transversa (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. None known.

Interpretations. Say (1832b) compared B. transversus with R. interstitialis Say, 1824, in the description. Most subsequent authors considered them to be synonyms, sometimes indirectly by using other subjective synonyms of R. interstitialis (e.g., LeConte in LeConte and Horn, 1876: 291), sometimes with reversed priority (e.g., Casey, 1892b: 487). However, Casey (1920: 300) considered B. transversus as the valid name for Baridius strenuus LeConte, 1869. Gilbert (1964: 80, 83) argued that Casey (1920) confused B. transversus with R. interstitialis and B. strenuus but did not say what he himself understood under B. transversus.

Extant Types. None known. The four Illinois specimens in the Germar Collection (MLUH) are *B. striata* (Say, 1832) but they have no type status.

Notes. Say (1832b) compared B. transversa with B. interstitialis. Along the section of the Missouri river visited by Say and Nuttall occur three other species in the R. interstitialis size range with deep, punctate striae. Only one of them has a prothorax similar to that of R. interstitialis, fits Say's description of *B. transversus*, and in fact has been considered as that species by Casey (1920). The other two, i.e., B. striatus and B. umbilicatus LeConte, 1869, have a less bulky pronotum, which leaves two options: (i) B. transversus goes into synonymy with R. interstitialis or (ii) the name is applied to the second species with a bulky pronotum. The first option requires a lectotype designation for R. interstitialis because the original series included two or even three species (see discussion there). The second option is more appealing than the first, because the present name for the species in question, the common *B. strenuus* LeConte, needs to be changed in any case. I designate here the holotype of Baridius sulcipennis Heyden, 1868, as the neotype for *Baridius* transversus Say with the purpose of (i) clarifying its muddled taxonomic status and (ii) suppressing two unaccustomed names. The specimen is curated in the Heyden Collection (SDEI) and bears the labels "10," "Frankfort," "sulcipennis," "type," "Frankfurt/ false, / sed Mexico," "3," and, in Champion's hand, "B. puncticollis/ Boh." Baris transversa (Say) is a new senior objective synonym of B. sulcipennis Heyden and B. sulcipennis Brisout, 1870, and a new subjective synonym of B. strenuus LeConte plus its eight currently included synonyms (see Gilbert, 1964: 80) (new synonyms). Baridius sulcipennis Heyden, 1868, is a senior primary homonym of B. sulcipennis Brisout, 1870.

Cryptorhynchus anaglypticus Say, 1832b: 18

Modern Name. Conotrachelus anaglypticus (Say).

Origin of Specific Name. Curculio anaglypticus; Knoch (in Melsheimer, 1806: 28).

Type Locality. United States; on stem of hickory, larva in fruit [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "33 Cryptor. analypticus, nob." (Ref. 10) and Schönherr one specimen as "(383) [error for 583] 40 analypticus, n." (Ref. 15), whereupon Schönherr replied, "40. analypticus Say.— Cryptorhynchus id". Germar" (Ref. 19).

Interpretations. Say (1832b) apparently referred to two different species in the description: one observed on the stem of hickory, the other developing in the fruit. The name has been used consistently in the sense of LeConte (in LeConte and Horn, 1876: 234), who provided keys to four species groups and to a total of 24 nominal species. Brooks (1924: 377) studied the biology and introduced the name cambium curculio into the economic literature. Schoof (1942: 123) designated a neotype in the prevailing sense, i.e., for the cambium boring species.

Extant Types. One syntype is in drawer 142 of the Schönherr Collection (NHRS), with the label "Rh: anaglyp/ ticus. Say./ Mississippi/ Say." The type status of the specimens in the Germar Collection is uncertain, because it is unknown whether Say had drafted the description already by 1827. Schoof (1942) designated a neotype from Topeka, Kansas.

Notes. This is one of the three names that follow "39 retentus n. (Mississippi)" on Say's retained list (Ref. 15). It is not obvious that they have ditto marks standing for "Mississippi" but Schönherr gives this locality for all three species. The extant syntype/s agree with the prevailing taxonomy so that I set aside School's neotype under Article 75.8.

## Cryptorhynchus elegans Say, 1832b: 18

Modern Name. Conotrachelus elegans (Say).

Origin of Specific Name. Curculio elegans; Melsheimer (in Melsheimer, 1806: 28).

Type Locality. New Jersey and Florida, varieties from Missouri; on *Pinus rigida* [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "38 elegans, n." (Ref. 15), whereupon Schönherr replied, "38. elegans Say. — Cryptorhynchus id"." (Ref. 19).

Interpretations. Say (1832b) described the nominal form based on specimens from two states and mentioned two additional varieties obtained in Missouri. Schoof (1942: 83) reviewed the past usage of the name in North America. He concluded that LeConte's redescription and key (LeConte and Horn, 1876: 228) influenced later entomologists, but without type material, the true identity of *C. elegans* remains speculative. Confusions occurred in the past in particular with C. aratus (Germar, 1823); C. seniculus LeConte, 1876; and C. hayesi Schoof, 1942. Life history data of these species generally were unreliable at that time because of misidentifications. He tried to establish stability by designating a neotype that agrees with LeConte's identification.

Extant Types. One syntype is in drawer 142 of the Schönherr Collection (NHRS) with the label "Rh: elegans/ Say./ Amer. bor. Say." It is not obvious if it represents the nominal form or any of the two varieties. Schoof (1942: 82) designated a neotype from Jefferson Barracks, Missouri.

Notes. Say (1832b) mentioned that he obtained the species in June on *Pinus rigida*, the northern pitch pine. It is possible that he referred here to his 1817 collecting trip with Maclure, Lesueur, and Troost to New Jersey, the only type locality of *C. elegans* where this conifer occurs. Another

possibility is that he misidentified the plant and the weevil was collected in June 1819 along the Missouri river. The neotype designated by Schoof (1942) is either to be set aside under Article 75.8 or to be confirmed under discussion of Say's originally included varieties, the extant syntype, and his other preserved *Conotrachelus* specimens.

Cryptorhynchus foveolatus Say, 1832b: 19

Modern Name. Tyloderma foveolatum (Say).

Origin of Specific Name. Curculio foveolatus; Knoch (in Melsheimer, 1806: 28).

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Germar at least one specimen as "34 Cryptor. foveolatus, nob." (Ref. 10) and Schönherr one specimen as "(599) 43 foveolatus, n. (mutillated)" (Ref. 15). Harris sent Schönherr one unidentified specimen, either as "80. Cryptorhynchus [space] (Harris 1544) N. Car." or under numbers 82–84 (Ref. 24).

Interpretations. Wibmer (1981: 18), in his revision of the North American species, concluded that the name had been applied consistently in the literature except for one confusion with *T. pseudofoveolatum* Wibmer, 1981, by Champion (1905a: 527). This can be attributed partially to the commonality of the species understood under this name and partially to Horn (1873: 468), who redescribed the species. However, Harris apparently was unfamiliar with this species when he sent a specimen to Schönherr in 1836 (Ref. 24).

Extant Types. One syntype is in drawer 135 of the Schönherr Collection (NHRS). It lacks the head (noted in Ref. 15 as "mutilated" and in Ref. 19 as "defectus") and bears Schönherr's handwritten label "Cr: foveolatus/ Say./ Amer. Bor. Say." The second specimen in the same drawer is from Harris and has no type status. In the Harris

Collection (MCZ) are two syntypes, which Harris obviously took from the Say Collection, one of them still with Say's original label. The type status of the specimens in drawer 9/2/17 of the Germar Collection (MLUH) is uncertain.

#### Cryptorhynchus bisignatus Say, 1832b: 19

Modern Name. Eubulus bisignatus (Say).
Origin of Specific Name. Curculio bisignatus; Knoch (in Melsheimer, 1806: 28).
Type Locality. Indiana [stated in description]

Exchange of Specimens. Say sent Schönherr one specimen as "(607) ■44 bisignatus, n." (Ref. 15), whereupon Schönherr replied, "44. bisignatus Say — Cryptorhynchus luctuosus Dej." (Ref. 19).

Interpretations. Say (1832b) described C. bisignatus to obtain date priority over C. luctuosus which was about to be described by Boheman (in Schönherr, 1837: 146). Schönherr informed Say about the conflicting names (Ref. 19), but both names were published all the same. Boheman listed, with a question mark, C. bisignatus and Curculio parochus Herbst, 1797, as possible synonyms of C. luctuosus, an opinion almost certainly taken from Dejean (1835: 293). Obviously, C. bisignatus and C. parochus were unfamiliar to him, and Say's submitted specimen seemed no longer available at that time. What followed was a bewildering confusion of names that involved not only those mentioned above but also C. misellus Boheman, 1837; C. moestus J. E. LeConte, 1824 (not Boheman, 1844; not Gistel, 1848); C. obliquefasciatus Boheman, 1844; and C. pumilus Boheman, 1837 (e.g., LeConte and Horn, 1876: 251; Champion, 1905b: 581; Blatchley and Leng, 1916: 509). Anderson (2008b: 293) designated a neotype in the interests of nomenclatural stability and, for the first time, provided robust criteria for the distinction of the North American species of Eubulus Kirsch, 1869.

Extant Types. The syntype sent to Schönherr apparently was among those specimens that arrived damaged (Ref. 18); other syntypes are unknown but seem to have existed (asterisk erased on Say's list). Anderson (2008b) designated a neotype from the J. L. LeConte Collection (MCZ).

Notes. The names for the three North American Eubulus need further work. Herbst (1797: 55) gave the length of C. parochus as 1.5 lines [3 mm] so it may be a senior synonym of either C. bisignatus Say (not Suffrian, 1876) or C. obliquefasciatus Boheman, while the much larger C. moestus J. E. LeConte or Rhyssomatus beutenmuelleri Van Dyke, 1930, may take the name C. parochus of authors. The type of C. obliquefasciatus, in drawer 135 of the Schönherr Collection (NHRS), is a North Carolina specimen sent by Harris to Schönherr in December 1836 (Ref. 24; probably collected by Hentz). I was unable to find in the Schönherr Collection the syntype of C. bisignatus Say, what corroborates the early loss indicated above. In drawer 136 stood the type of Cryptorhynchus aspericollis Rosenschöld, 1837, under Schönherr's manuscript name 161 C. bisignatus [which I have moved up by one row to its correct place], but there is no Say specimen. In drawer 135 are two identically pinned syntypes of C. luctuosus from Dejean, both being C. bisignatus in the sense of Anderson (2008b). The next reviser needs to address the fate of Herschel's and J. E. LeConte's specimens, to consider effects on other names (e.g., Eubulus moestus Fiedler, 1939) and to cautiously fix types for C. parochus and C. moestus. The neotype designation for C. bisignatus by Anderson (2008b) stands if Schönherr's syntype cannot be found.

Cryptorhynchus (Camptorhinus) tubulatus Say, 1832b: 20

Modern Name. Idiostethus tubulatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. Schönherr (1844: 355) speculated that this is a species of Centrinus Schönherr, 1825. LeConte (in LeConte and Horn, 1876: 303) considered the name as a senior synonym of Baridius ovatus LeConte, 1869, in the genus Stethobaris LeConte, 1876. Casey (1892c: 650) applied the name to another, somewhat similar species in the genus Idiostethus Casey, 1892. These two interpretations were confounded with each other in the subsequent literature (Brown, 1966: 858).

Extant Types. None known.

*Notes.* I am unaware of any regionally occurring Molytinae (incl. Cryptorhynchinae) in the given size range that would match Say's description even remotely. The description of color, surface texture, eyes, and pronotal collar supports a placement in Baridinae. Casey's (1892c) interpretation of C. tubulatus is appealing except that the body size falls notably short of Say's extant Tyloderma foveolatum specimens, for which he gave the same measurement. However, the combination of description and regional collecting data suggest that the true C. tubulatus was either Dirabius calvus (Le-Conte, 1876) or a male *Dirabius rectirostris* (LeConte, 1876). Their elongate body also would explain Say's initial placement in Camptorhinus Schönherr, 1825, a genus without the slightest resemblance to Stethobaris or Idiostethus.

## Ceutorhynchus triangularis Say, 1832b: 20

Modern Name. Rhinoncus triangularis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description].

Exchange of Specimens. None known.

Interpretations. Schönherr (1843: 349) speculated that C. triangularis might be a species of Phytobius Schönherr, 1833. LeConte (in LeConte and Horn, 1876: 284) considered Rhinoncus pericarpius sensu Paykull, 1792 (not Linné, 1758), the valid name for C. triangularis, and Blatchley (in Blatchley and Leng, 1916: 461) included R. occidentalis Dietz, 1896, as another junior synonym. Dietz (1896) and Dalla Torre and Hustache (1930) ignored the name. Thereafter, C. triangularis was treated again as a valid name, e.g., in Rhinoncus Schönherr, 1825, by Hoebeke and Whitehead (1980: 560), in Campulirhynchus Dejean, 1821, by O'Brien and Wibmer (1982: 175), in Pelenomus Thomson, 1859, by Salsbury (2000: 254), and again in Rhinoncus by Colonnelli (2004: 13), with R. occidentalis as a synonym.

Extant Types. The Say Collection (MCZ) has one damaged syntype (without head and prothorax) labeled "Ceutorhynchus/ triangularis, S." The specimen was recorded by Mawdsley (1993: 168).

#### Ceutorhynchus inaequalis Say, 1832b: 20

Modern Name. Craponius inaequalis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana; many specimens on a newly constructed fence [stated in description].

Exchange of Specimens. None known.

Interpretations. Schönherr (1843: 349) speculated that the description may apply to a species of *Phytobius* Schönherr, 1833. Walsh (1868: 13), after consultation with J. L. LeConte, applied the name to a species that has become known as the grape curculio and placed it in *Coeliodes* Schönherr, 1837. LeConte (in LeConte and Horn, 1876: 269) made it the type species for *Craponius* LeConte, 1876, even though his identification was a mere guess (see Walsh, 1868: 18) in context with

another misidentification, i.e., that of Ceutorhynchus curtus Say, 1832.

Extant Types. None known.

# Zygops (Coptorus [sic]) quercus Say, 1832b: 20

Modern Name. Cylindrocopturus quercus (Say).

Origin of Specific Name. Curculio quercus; Melsheimer (in Melsheimer, 1806: 29).

Type Locality. None provided [Mississippi on Schönherr's specimen].

Exchange of Specimens. Say sent Schönherr one specimen as "(616) \*41 quercus, n." (Ref. 15).

Interpretations. Say interpreted Melsheimer's unavailable Curculio quercus in two different ways: as Cryptorhynchus operculatus Say, 1824a, and as Zygops quercus Say, 1832b. Gyllenhaal (in Schönherr, 1838: 649, 650) treated them as two valid species of Copturus Schönherr. LeConte (in LeConte and Horn, 1876: 261) interpreted C. quercus based on Gyllenhaal's redescription and considered it as doubtfully distinct from C. adspersus LeConte, 1876. The subsequent literature was confused and applied frequently to C. quercus in the sense of LeConte and Horn (1876).

Extant Types. There is one pinned syntype in drawer 144 of the Schönherr Collection (NHRS) with the labels "C. quercus./ Say./ Mississippi./ Say." and "29." In the Germar Collection (MLUH) are two specimens, one of them with an "X" on a small, green, triangular label; their origin is unknown.

Notes. This is one of the three names that follow "39 retentus n. (Mississippi)" on Say's retained list (Ref. 15). It is not obvious that they have ditto marks standing for "Mississippi" but Schönherr gives this locality for all three species. Say noted on his retained copy, "[41 quercus] perhaps var. or same as [42 operculatus]."

Centrinus scutellum album [sic] Say, 1832b: 21

Modern Name. Odontocorynus umbellae (Fabricius, 1801).

Origin of Specific Name. Curculio scutellum album; Knoch (in Melsheimer, 1806: 28).

Type Locality. Pennsylvania, Missouri, Indiana, variety from Arkansa [stated in description].

Exchange of Specimens. Say sent specimens to Germar as "24 Rynchaenus scutellum album, nob." (Ref. 10), to Winthem as "98 Rynchaenus scutellum album, nob." (Ref. 11), and to Schönherr as "(606) 31 scutellum-album, n." (Ref. 15). Schönherr replied, "31. scutellum album Say. — Toxeres id<sup>m</sup>." (Ref. 19).

Interpretations. Say applied Knoch's name to two very similar species that frequently occur in substantial numbers on the flowers of certain Asteraceae. Gemminger and Harold (1871: 2633) cited the manuscript names that Knoch and other European entomologists originally used for Say's species. When I revised *Odontocory*nus Schönherr (Prena, 2008), a total of 51 valid names existed for the two species originally included in the type series. The frequently used name C. scutellumalbum had been applied to three distinct species in the literature, so I suppressed it as a subjective junior synonym of Curculio umbellae Fabricius, 1801.

Extant Types. Prena (2008: 269) designated a lectotype from two specimens in the Schönherr Collection but rejected the specimen in the Say Collection (MCZ) as a syntype because of insufficient evidence. However, my later comparison with other specimens in the Say and Harris collections and Say's characteristic checkmark on the label suggest that this specimen belonged to the original series. The specimen(s) sent to Winthem apparently went to Lüders, were acquired by the Museum Hamburg in 1855, and destroyed in 1943 (Weidner, 1976: 87).

None of the eight specimens in the Germar Collection (MLHU) show evidence that they were part of Say's 1828 shipment.

### Rhynchophorus praepotens Say, 1832b: 21

Modern Name. Scaphomorphus trivittatus (Say, 1832).

Origin of Specific Name. Proposed by Say.

Type Locality. Arkansaw [stated in description; in Ref. 15 with doubt]; Arkansaw near Rocky Mountains [in description of Cleonus trivittatus Say, 1832b: 10].

Exchange of Specimens. Say sent Schönherr one specimen as "\*59 trivittatus, n. Arkansaw? praepotens, n." (Ref. 15).

Interpretations. The name has remained doubtful since the description. Boheman (in Schönherr, 1835: 62) assigned it to Lixus Fabricius, 1801; Schönherr (1838: 988) to Rhynchophorides incertae sedis; Melsheimer (1853: 89) to Sphenophorus Schönherr, 1838; LeConte (1859: 288) to Cleonus Schönherr, 1826 (tentatively as a synonym of C. trivittatus Say); Anderson (1987: 563) to Cleonidius Casey, 1891; and Alonso-Zarazaga and Lyal (1999: 17) implicitly to Scaphomorphus Motschulsky, 1860. Anderson (1987) did not fix the name in his revision because it stayed in synonymy with C. trivittatus.

Extant Types. The holotype (asterisk on Say's list) is in drawer 107 of the Schönherr Collection (NHRS), with the labels "Paratypus" and "L. praepotens/ Civit: Foeder:/ America bor./ Say." The paratype label was attached by museum staff as a matter of routine.

Notes. Say (1832b: 10) explained under Cleonus trivittatus that he had described the species previously in a rejected manuscript as Lixus trivittatus. He mentioned "two or three specimens" from near the Rocky Mountains in Arkansaw, obviously collected during the 1819–20 expedition. One specimen went to Germar in January 1828 (Ref. 10) and another one to

Schönherr in March 1830 (Ref. 15). However, Say changed the name of Schönherr's specimen to "praepotens," and the asterisk indicates that this was his last remaining specimen (Ref. 15). Say then described C. trivittatus on page 10 (Say, 1831b) and R. praepotens on page 21 (Say, 1832b), each time with a different wording. Evidently something went wrong, perhaps because he had two different names in his notes but no specimens left. What instigated the change of names is unclear, but it might have to do with the usage of the original specific name for another species on page 12. Schönherr (1838: 988) apparently lost track of R. praepotens because his specimen stood under Cleonus. The specimens sent to Germar and Schönherr are S. trivittatus in the sense of Anderson (1987).

#### Rhynchophorus interstitialis Say, 1832b: 21

Modern Name. Sphenophorus interstitialis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "\*60 interstitialis, n." (Ref. 15).

Interpretations. Schönherr (1838: 988) listed the name under Rhynchophorides incertae sedis. Horn (1873: 419) placed it as a variety of Sphenophorus pertinax (Olivier, 1807). Vaurie (1951: 49) excluded the name from her revision because Horn (1873) had misidentified S. pertinax and she herself could not match the description of R. interstitialis with any of the species known to her. O'Brien and Wibmer (1982: 214) followed Vaurie (1951) and listed the name under Sphenophorus, incertae sedis.

Extant Types. The name is a senior objective synonym of S. parvulus Gyllenhaal, 1838 (see notes below). The holotype

(asterisk on Say's list) is in drawer 45 of the Schönherr Collection (NHRS), with the label "Amer. bor./ Say."

Notes. Gyllenhaal (in Schönherr, 1838: 961) described S. parvulus based on a specimen received from Say. While Say did not send a specimen with this name, a singleton named interstitialis appears on his retained list as item 60, which is the only submitted Sphenophorus species I could not find in the Schönherr Collection, at least not under this name. Vaurie (1951: 107) discussed that only a paratype but not the holotype of S. parvulus could be found, which proved to be a subjective synonym of S. pumilus Gyllenhaal, 1838 (not Allard, 1870). However, I found no support for her assumption that S. parvulus was described from more than one specimen. Because the description of R. interstitialis matches perfectly Say's specimen standing under S. parvulus, I am convinced that Gyllenhaal described Say's R. interstitialis as S. parvulus (new synonym).

## Rhynchophorus truncatus Say, 1832b: 22

Modern Name. Sphenophorus pertinax (Olivier, 1807).

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "109 insculptus, n. [possibly added later:] insculptus MacLeay? [next line:] inscripta — pertinax Oliv." (Ref. 15).

Interpretations. Schönherr (1838: 966) did not know R. truncatus and placed it under Sphenophorus, incertae sedis. Horn (1873: 419) considered it a subspecies of S. pertinax Olivier, 1807, and Vaurie (1951: 164) as a junior synonym of the latter. These authors interpreted the original descriptions but had not seen the types.

Extant Types. The Say Collection (MCZ) has two well-preserved syntypes on short

pins, one of them with Say's handwritten label. The specimen sent to Schönherr is in drawer 45 under S. pertinax var.  $\beta$ ; it would be a syntype in the likely case that Say had changed the name of his "109 insculptus" to R. truncatus.

## Rhynchophorus cicatricosus Say, 1832b:

Modern Name. Sphenophorus cariosus (Olivier, 1807).

Origin of Specific Name. Proposed by Say.

Type Locality. Louisiana [stated in description]; New Orleans [Ref. 15 and on label].

Exchange of Specimens. Say sent Schönherr one specimen as "116 cicatricosus, n. New Orleans — allied to the preceding [i.e., immunis and insculptus]" (Ref. 15).

Interpretations. Gyllenhaal (in Schönherr, 1838: 940) described Sphenophorus flexuosus from one or more specimens received from Guérin-Méneville and one syntype of R. cicatricosus received from Say. The footnote "mihi invisus" several pages later (Schönherr, 1838: 966) suggests that Schönherr at some point must have lost track of Say's specimen. Horn (1873: 420) used S. cariosus (Olivier, 1807) as the valid name for R. cicatricosus, S. flexuosus, and Calandra larvalis Germar, 1823, without further comment except that the species is common in the [Mexican] Gulf States and easily recognized. Horn (in LeConte and Horn, 1876: 425) included Calandra callosa Olivier, 1807, as another synonym; this was rebutted by Chittenden (1906: 176) and so accepted by subsequent authors.

Extant Types. The specimen sent to Schönherr (NHRS) is in drawer 45 under S. larvalis Germar and S. flexuosus Gyllenhaal, with the labels "Paratypus" and "C. cicatricosus/ Say./ N. Orleans. Say."

#### Rhynchophorus venatus Say, 1832b: 22

Modern Name. Sphenophorus venatus (Say); revised name.

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. None known.

Interpretations. Schönherr (1838: 966) did not know R. venatus and placed it under Sphenophorus, incertae sedis. Horn (1873: 426) considered Say's four nominal species R. immunis, R. placidus, R. rectus, and R. venatus as conspecific, gave nomenclatural priority to R. venatus but used R. placidus as the valid name in the key and subheading. This action was based on his interpretation of the descriptions and not on the study of types, which he believed were destroyed. Also included as synonyms were Sphenophorus confusus Gyllenhaal, 1838; S. fallax Boheman, 1845; and S. reticulaticollis Boheman, 1845. Chittenden (1904: 133) accepted Horn's synonymies except for S. reticulaticollis. Vaurie (1951: 119) removed also S. rectus from synonymy with S. venatus and designated a neotype, because S. venatus in her sense is widespread and has regional subpopulations. One of her five recognized subspecies took the name S. reticulaticollis.

Extant Types. The MCZ has one syntype with Say's handwritten label "venatus/ S [followed by his characteristic checkmark]." Its abdomen was eaten by a dermestid larva. I designate here this specimen as the lectotype for *R. venatus*. The neotype designated by Vaurie (1951) is set aside under ICZN Article 75.8.

Notes. The economic literature may leave the impression that hunting billbug is a more or less frequently cited name. However, it almost always was used for *S. venatus vestitus* Chittenden, 1904. I studied the extant types of *S. venatus* and its four currently included synonyms. At least three of the four nominal Say species lumped by Horn (1873) are distinct from each other.

Sphenophorus venatus is a senior subjective synonym of *S. destructor* Chittenden, 1906 (**new synonym**). The valid name for *S. venatus* in the sense of Vaurie (1951) is *S. placidus* (Say).

#### Rhynchophorus rectus Say, 1832b: 22

Modern Name. Sphenophorus rectus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. None known.

Interpretations. Schönherr (1838: 966) did not know R. rectus and placed it under Sphenophorus, incertae sedis. Horn (1873: 426) made it a junior synonym of S. venatus in his discussion but reversed priorities in the key and subheading. Chittenden (1904: 134) maintained R. rectus in synonymy with S. venatus. Vaurie (1951: 126) designated a neotype for R. rectus and used the name for a distinct, up to then unrecognized, species.

Extant Types. None known. Vaurie (1951) designated a neotype from Pine Island, New York.

### Rhynchophorus immunis Say, 1832b: 23

Modern Name. Sphenophorus immunis (Say); resurrected name.

Origin of Specific Name. Proposed by Say.

Type Locality. Louisiana [stated in description]; New Orleans [given on lectotype label].

Exchange of Specimens. Say sent Schönherr one specimen as "115 immunis, n. New Orleans — allied to insculptus, n." (Ref. 15).

Interpretations. Schönherr (1838: 966) claimed not to know *R. immunis* and placed it under *Sphenophorus*, incertae sedis. Horn (1873: 426) considered *S. immunis* as conspecific with *S. venatus* and selected the latter as the valid name. He was followed therein by Chittenden (1904:

133) and Vaurie (1951: 120), who too believed that all Say types were destroyed.

Extant Types. One syntype is in drawer 157 of the Schönherr Collection (NHRS), with Schönherr's label "C: immunis./ Say./ N. Orleans. Say." This specimen is selected here as the lectotype for S. immunis (Say).

Notes. Gyllenhaal (in Schönherr, 1838) either overlooked the description of *R. immunis* or, at the time of writing, was still unaware of Say's Curculionites pamphlet. When he described Say's syntype on page 943 as *Sphenophorus sayi*, he failed to mention the supposed manuscript name, what triggered the ensuing confusion. *Sphenophorus sayi* Gyllenhaal, 1838, is an objective synonym of *S. immunis* Say, 1832 (new synonym). With reservation I maintain the Californian *S. subcarinatus* Mannerheim, 1843, in synonymy with *S. immunis*; it was not seen by Vaurie (1951) and may turn out to be a different species.

#### Rhynchophorus placidus Say, 1832b: 23

Modern Name. Sphenophorus placidus (Say); resurrected name.

*Origin of Specific Name*. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "62 placidus, n." (Ref. 15).

Interpretations. Gyllenhaal (in Schönherr, 1838: 947) placed R. placidus in Sphenophorus, matched it with Chevrolat's manuscript name Calandra obliqua, and redescribed the species under citation of Say's original publication. Schönherr (1845: 256) considered S. placidus as a variety of S. confusus Gyllenhaal, 1838. Gemminger and Harold (1871: 2650) gave Say's name priority over S. confusus. Horn (1873: 426) synonymized S. placidus with six other nominal species, used the name as valid in a key and subheading, but gave S. venatus Say, 1832, priority over all others in

the discussion. Chittenden (1904: 134) maintained *S. placidus* in synonymy of *S. venatus* and distinguished several similar species, some of which Vaurie (1951: 118) considered subspecies of *S. venatus*.

Extant Types. One syntype is under Sphenophorus confusus var.  $\beta$  in drawer 45 of the Schönherr Collection (NHRS), with Schönherr's label "C: placidus./ Say./ Am: bor. Say." This specimen is selected here as the lectotype for R. placidus Say.

*Notes. Sphenophorus placidus* (Say) is the valid name for *S. venatus* of authors, whereas S. venatus (Say, 1832) is the species presently known as S. destructor Chittenden, 1906. Even though these are more or less frequently used names, their taxonomy is so confused that I think it best not to sanction these misinterpretations. In fact, most citations of the hunting billbug apply to S. venatus vestitus Chittenden, 1904, rather than the nominal species. Vaurie (1951: 118) distinguished five subspecies of S. venatus [of authors], with two of them occurring in the East. Her diagnostic criteria were subtle and based on rather meager material for the nominal subspecies, with a number of specimens not fitting into her scheme. In my opinion, the lectotype of R. placidus agrees more with Vaurie's northeastern subspecies "venatus" than with the southeastern "vestitus," although I see reasons for lumping them altogether. Rhynchophorus placidus Say is resurrected here from synonymy with S. venatus (Say) and used in the sense of S. venatus of authors (not Say). The four nonnominal subspecies are placed under S. placidus as S. p. confluens Chittenden, 1904; S. p. glyceriae Chittenden, 1919; S. p. reticulaticollis Boheman, 1845; and S. p. vestitus Chittenden, 1904.

## Rhynchophorus inaequalis Say, 1832b: 23

Modern Name. Sphenophorus inaequalis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "61 inaequalis, n." (Ref. 15).

Interpretations. Gyllenhaal (in Schönherr, 1838: 953) included R. inaequalis in his description of Sphenophorus contractus Gyllenhaal, which up to then was a manuscript name introduced by Dejean. Horn (1873: 414) redescribed R. inaequalis without explaining why he associated the name with this particular species. Vaurie (1951: 100) designated a neotype from Tampa, Florida, to stabilize Horn's taxonomy.

Extant Types. One syntype is in the Say Collection of the MCZ (Mawdsley, 1993: 168). It still has Say's handwritten label (Prena, 2015, fig. 3), with his characteristic checkmark followed by "(61)/ inaequalis" [61 refers to the item number in Ref. 15]. The matching specimen of the latter shipment is in drawer 45 of the Schönherr Collection (NHRS) under S. contractus Dejean, with the labels "Paratypus" and "C. inaequalis./ Say./ Amer. bor. Say." The neotype designated by Vaurie (1951) is set aside under ICZN Article 75.8).

## Cossonus corticola Say, 1832b: 24

Modern Name. Cossonus corticola Say. Origin of Specific Name. Curculio corticola; Melsheimer (in Melsheimer, 1806: 30) [with handwritten note in Say's personal copy, "G. Cossonus"].

Type Locality. Missouri and Pennsylvania [stated in description]. Arkansaw [Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "71 corticola, n. [followed by ditto marks standing for Arkansaw], like 66 [i.e., platalea]" (Ref. 15), whereupon Schönherr responded, "71. corticola Say. — Cossonus id"." (Ref. 19). Harris sent Schönherr one specimen as "90 Cossonus corticolus? Say (Hentz 976) N. Car." (Ref. 24).

Interpretations. Horn (1873: 439) expressed the view that Say's description applies equally to two distinct species; one he identified tentatively as C. corticola, the other as C. concinnus Boheman, 1838. LeConte (in LeConte and Horn, 1876: 338) speculated whether C. corticola is the same as *C. minor* Wollaston, 1873. Champion (1909b: 48) included under C. corticola (sensu lato) specimens from Central America and confirmed the synonymy with C. minor based on a specimen identified by Buchanan. Kuschel (1962: 3) transferred the name to Borophloeus Wollaston, 1873, and included Rhyncolus latinasus Say, 1832c [for which he designated a lectotype], as a junior synonym. Hlaváč and Maughan (2013: 58) treated C. corticola [spelled corticolis] as the valid name for Borophloeus puncticollis Wollaston, 1873.

Extant Types. The Harris Collection (MCZ) contains two Say specimens without original labels. The syntype received by Schönherr has been lost, apparently long before my visit in 2009. His drawer 46 (NHRS) has only an empty pin with the label "399/58."

### Cossonus platalea Say, 1832b: 24

Modern Name. Cossonus platalea Say.
Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "66 platalea, n." (Ref. 15), whereupon Schönherr replied, "66. platalea Say. — Cossonus id"." (Ref. 19). Germar sent Schönherr a Philadelphia specimen, which was described as *C. subareatus* Boheman, 1845 (now a synonym of *C. platalea*). I found no match in Say's shipment to Germar for this specimen, so its original owner remains unknown.

Interpretations. When Horn (1873: 438) compared Say's original description of *C. platalea* with Boheman's redescription in

Schönherr (1838: 998), he was under the impression that these authors were referring to two different species, so he renamed Boheman's specimen as *C. bohemanni* [sic] Horn. Van Dyke (1916: 79) synonymized the two names because it turned out that Horn had misunderstood a preposition in Boheman's Latin text. Buchanan (1936: 111) included *C. subareatus* Boheman, 1845, as another subjective synonym.

Extant Types. The only known syntype is in drawer 46 of the Schönherr Collection (NHRS), with the label "Platalea. Say/ Civitates Foe-/ deratae Am. bor./ Say."

#### Dryophthorus corticalis Say, 1832b: 24

Modern Name. Dryophthorus americanus Bedel, 1885.

Origin of Specific Name. Curculio corticalis Paykull in Melsheimer (1806: 29), mistaken for a nomen nudum.

Type Locality. None stated in description.

Exchange of Specimens. Say sent Schönherr one specimen as "(610) 11 rudis, n. [apparently added later:] lymexylon Fabr.? corticalis Pay." (Ref. 15).

Interpretations. The name has been used consistently because there is but one native species of *Dryophthorus* Germar, 1823, in North America. Bedel (1885: 192) recognized the distinctness of Paykull's and Say's species and renamed the latter as *Dryophthorus americanus*.

Extant Types. One syntype is in drawer 48 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "C. rudis. Say./ Am. bor. Say."

Descriptions of New Species of Curculionites of North America, with Observations on Some of the Species Already Known. Supplement [signature 4, pp. 25–30].

Date of Publication. Before 26 December 1832 (copies mailed to Germar and received

by Harris, respectively; Ref. 22 and Scudder, 1899).

Notes. The fourth signature of the Curculionites pamphlet is a supplement to the descriptions on the preceding 24 pages. Say obviously was rushing out the first set of descriptions (he knew from Schönherr's last letter (Ref. 18) that the first volume of Genera et species curculionidum was in press), but he was occupied with a lawsuit and the publication of American Conchology. Almost all included species were described from singletons no longer in his possession. On 8 September 1832 he informed Harris that "I am now printing a Supplement" (Ref. 23).

### Erirhinus ephippiatus Say, 1832c: 25

Modern Name. Ellescus ephippiatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Indiana [stated in description]; Connecticut (in Schönherr, 1835: 289) applies to item 117 and perhaps the next few in Ref. 15 but not to 121 ephippiatus.

Exchange of Specimens. Say sent Schönherr one specimen as "121 ephippiatus, n." (Ref. 15), whereupon Schönherr replied, "126. ephippiatus Say. — Erirhinus id"." (Ref. 19).

Interpretations. The name is being applied in the sense of LeConte (in LeConte and Horn, 1876: 209), who apparently also made the identification in Walsh (1867a: 268). Casey (1885: 193) and Dietz (1891: 265) discussed the occurrence of deviating regional populations.

Extant Types. The only known syntype is in drawer 115 of the Schönherr Collection (NHRS), with Schönherr's handwritten label "epphippiatus [sic]/ Say./ Connecticut./ Say."

## Erirhinus rufous Say, 1832c: 25

Modern Name. Dorytomus rufus (Say); resurrected combination.

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description and Ref. 15]; "Florida" on the label of Schönherr's specimen is erroneous.

Exchange of Specimens. Say sent Schönherr one specimen as "\*89 rufa, n. Arkansaw — Missouri" (Ref. 15), whereupon Schönherr replied, "89. rufa Say. — Erirhinus rufus" (Ref. 19).

Interpretations. LeConte and Horn (1876) did not mention the species. Casey (1892a: 377) was the first to apply the name to a species of *Dorytomus* Germar, 1817. Blatchley (in Blatchley and Leng, 1916: 197) adopted this interpretation with reservations. O'Brien (1970: 1) placed the name in synonymy with *Ellescus ephippiatus* (Say, 1832).

Extant Types. The holotype (asterisk on Say's list) is in drawer 116 of the Schönherr Collection (NHRS), under Erirhinus, with the labels "Paratypus" and "— rufus. Say./ Florida. Say."

*Notes.* In his annotated compilation of Say's publications, LeConte (1859: 298) changed the specific name to "rufus" without mention of the original spelling "rufous." The same spelling had been used previously by Schönherr (1835: 301, 1843: 178), who obviously took it from his correspondence with Say and not from the original publication. Because LeConte's incorrect subsequent spelling is in prevailing usage and attributed to Say (1832c), it is deemed to be the correct original spelling and is preserved under ICZN Article 33.3.1. The holotype is a species of Dorytomus (resurrected combination). Dorytomus rufus (Say, 1832) is a senior subjective synonym of D. squamosus LeConte, 1876 (new synonym).

Anthonomus erythropterus Say, 1832c: 25

Modern Name. Anthonomus suturalis J. E. LeConte, 1824.

Origin of Specific Name. Curculio erytropterus [sic]; Melsheimer (in Melsheimer, 1806: 27).

Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "(579) 28° erythropterus, n." (Ref. 15), upon which Schönherr replied, "28. erythropterus Sayi. — Anthonomus suturalis Dej:" (Ref. 19).

Interpretations. Gyllenhaal (in Schönherr, 1835: 342) described A. suturalis Gyllenhaal (not J. E. LeConte, 1824) from specimens received as A. suturalis [Dejean] and A. erythropterus Say. Its senior homonym, A. suturalis J. E. Le-Conte, started to prevail in the literature for the same species when Walsh (1867a: 266) discussed a previous misidentification made by J. L. LeConte (i.e., J. E. LeConte's son). However, J. L. LeConte not only had misidentified Walsh's weevil inquiline from aphid galls as A. scutellatus Gyllenhaal, 1835 (the strawberry bud weevil), but just a few years later, his incorrect application of the name A. suturalis for a weevil currently known as the cranberry weevil, A. musculus Say, 1832, was published by Packard (1870: 242). Riley (1885: 276) discussed the confusion of names which nevertheless proliferated for another 40 years (e.g., Lacroix, 1926; Tuttle, 1956). Burke (1975: 61) synonymized three other nominal species with A. suturalis J. E. LeConte. With very few exceptions (e.g., Shimer, 1869: 394), authors generally maintained A. erythropterus Say in synonymy with A. suturalis J. E. LeConte.

Extant Types. The holotype of A. cryth-ropterus (asterisk on Say's list) is in drawer 117 of the Schönherr Collection (NHRS) under A. suturalis Dejean, with Schönherr's handwritten label "erythropterus/ Say./ Pensylvan. Say."

Anthonomus signatus Say, 1832c: 25

Modern Name. Anthonomus signatus Say.

Origin of Specific Name. Proposed by Schönherr [Ref. 19] and used instead of sanguinipennis Say ms.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr two specimens, one as "\*90 sanguinipennis, n. [added later:] signatus Sch.," the other as "\*93 scutellatus, n." [later described under that name by Gyllenhaal in Schönherr (1835: 348)] (Ref. 15). Harris sent Schönherr one specimen from his own collection as "74. Balaninus Ceanothi Harris ms, taken from Ceanothus americanus" (Ref. 24; Schönherr, 1843: 222).

Interpretations. The species name is being applied to the strawberry bud weevil, a pest of strawberries and raspberries in North America. This interpretation rests a great deal on opinions expressed by Le-Conte and Horn (1876: 199) and Dietz (1891: 215). Three synonyms were recognized by Dietz (1891: 215), Blatchley and Leng (1916: 300), and Burke (1975: 60), with two of these names having themselves histories of misidentifications and overlooked homonyms.

Extant Types. The holotype of A. signatus (asterisk on Say's list) is in drawer 117 of the Schönherr Collection (NHRS) under A. signatus var.  $\beta$ , with Schönherr's handwritten label "sanguinipen/ nis. Say./ Am: bor: Say."

## Tychius aratus Say, 1832c: 26

Modern Name. Tychius aratus Say.

Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen with the note "\*97 aratus, n. [ditto mark standing for Missouri] penicillus Herbst?" (Ref. 15), whereupon Schönherr replied, "97. aratus Say. — Tychius arator" (Ref. 19).

Interpretations. LeConte (in LeConte and Horn, 1876) treated *T. aratus* as an unrecognized name (p. 432 in appendix 2), possibly representing *T. tectus* LeConte, 1876 (p. 217). Casey (1892a: 417) treated *T. aratus* as distinct from *T. arator* Gyllenhaal, 1835, and referred in the discussion (p. 418) to the "type specimen" in a nomenclatural meaningless sense. Clark (1971: 33) recognized the two names as objective synonyms.

Extant Types. The holotype (asterisk on Say's list) is in drawer 119 of the Schönherr Collection (NHRS), with the labels "Typus," "aratus Say./ penicillus?/ Herbst./ Missuri. Say.," and "78/ 62." Clark (1971) designated this specimen as the neotype for T. aratus. I found no evidence that the specimen in the Germar Collection (Taschenberg, 1869: 201) came from Say.

Notes. Schönherr (Ref. 19) suggested to make the specific name a noun, i.e., to change aratus (Latin for furrowed or wrinkled) to arator (Latin for plowman or farmer). Eventually, each of the two names was applied to the same specimen, which therefore is the holotype for both. Its designation as the neotype by Clark (1971) is set aside under Article 75.8.

#### Tychius amoenus Say, 1832c: 26

Modern Name. Smicronyx amoenus (Say). Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description]; Missouri [Schönherr (1835: 229), probably erroneous].

Exchange of Specimens. Say sent Schönherr one specimen as "\*79 amoena, n." (Ref. 15), upon which Schönherr replied, "79. amoena Say. — Tychius amoenus" (Ref. 19).

Interpretations. Even though Say's description and the original placement in Tychius Germar, 1817, provided hardly any clue about the identity of this species, LeConte (in LeConte and Horn, 1876: 168) correctly applied the name and, without

doubt, his key aided other entomologists. I found no discussion of, or reference to, this name in the correspondence of the early North American entomologists. Anderson (1962: 264) designated Say's specimen in the Schönherr Collection as the neotype.

Extant Types. The holotype (asterisk on Say's list) is in drawer 119 of the Schönherr Collection (NHRS), with the labels "Amoena. Say/ Missuri. Say." and "NEOTYPE/Tychius/ amoenus/ Say/ D.M. Anderson 1957." Its designation as the neotype by Anderson (1962) is set aside under Article 75.8.

#### Baridius nigrinus Say, 1832c: 26

Modern Name. Pseudobaris nigrina (Say). Origin of Specific Name. Curculio nigrinus; Melsheimer (in Melsheimer, 1806: 29).

Type Locality. Pennsylvania [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "(691) \*55 nigrinus, n." (Ref. 15), whereupon Schönherr replied, "55. nigrinus Say. — Baridius id"." (Ref. 19). The second specimen in the Schönherr Collection came from Karl Zimmermann (aka Charles Zimmerman), collected in eastern Pennsylvania around 1833.

Interpretations. The name is being applied to a widespread species that can be locally detrimental to commercially grown mint. Generally speaking, it has been used correctly in the economic literature, but there is a bewildering confusion with other available names for this and morphologically similar species (see notes below).

Extant Types. In drawer 128 of the Schönherr Collection (NHRS) are two specimens under this name. The male, labeled "nigrinus/ Amer. bor. Say," is the holotype, or at least a syntype. The female, labeled "Pensylvan. orien./ Zimmerman" and not mentioned in the description, was received afterward (Zimmermann arrived in

the United States not before September 1832).

Notes. Centrinus confusus Boheman, 1836 (presently placed in Sibariops Casey, 1920), was described from at least two specimens. One was a sedge-associated Florida specimen submitted by Say under the name confusus, the other was a mintassociated California specimen submitted by Mannerheim. The latter is what I consider a western morph of Pseudobaris nigrina, presently known as P. californica Casey, 1920. It almost certainly was collected by Eschscholtz in 1824, and vouchers were given to Dejean and Mannerheim under the manuscript name Baris sulcipennis Eschscholtz. Not surprisingly, P. nigrina/californica/sulcipennis and S. confusus have been mixed up in the literature or even were considered as one and the same species (e.g., Mannerheim, 1843: 293).

### Baridius scolopax Say, 1832c: 26

Modern Name. Rhoptobaris scolopax (Say).

*Origin of Specific Name*. Proposed by Say.

Type Locality. Missouri [stated in description and Ref. 15]; possibly referring to the river section separating today's Nebraska and Iowa [see Prena (2012) for distribution data] but more likely collected further west.

Exchange of Specimens. Say sent Schönherr one specimen as "\*86 scolopax, n. Arkansaw Missouri" (Ref. 15), whereupon Schönherr replied, "86. scolopax Say. — Baridius id"." (Ref. 19).

Interpretations. LeConte (1869: 365) misused the name for a species of Aulobaris LeConte, 1876. Prena (2012: 241) reestablished the original meaning based on the study of the holotype, thereby suppressing the prevailing but more junior name, Orthoris crotchii LeConte, 1876.

Extant Types. The holotype is in drawer 128 of the Schönherr Collection (NHRS),

with Schönherr's label "Scolopax/ Say./ Missuri. Say."

#### Baridius acutipennis Say, 1832c: 27

Modern Name. Pseudobaris (Microcraptus) acutipennis (Say); resurrected combination.

Origin of Specific Name. Proposed by Say.

Type Locality. Mexico [stated in description and Ref. 15]; probably vicinity of Mexico City (Barber, 1928).

Exchange of Specimens. Say sent Schönherr one specimen as "\*114 politus n. Mexico [later added:] acutipennis n." (Ref. 15), whereupon Schönherr replied, "114. acutipennis Say. — Baridius id"." (Ref. 19).

Interpretations. Casey (1892c: 553) recognized B. acutipennis as a species of Pseudobaris LeConte, 1876 (not Fairmaire, 1897), with pointed elytral apices. Champion (1909a: 445) applied the name without comment to a "common insect in Central America" and included B. callosipennis Solari and Solari, 1906, as a junior subjective synonym. Casey (1922: 442) selected B. acutipennis as the type species for Microcraptus Casey, 1922, a subgenus of Pseudobaris LeConte, 1876, which Hustache (1938: 31) and later authors erroneously placed in Craptus Casey, 1922.

Extant Types. The holotype is in drawer 129 of the Schönherr Collection (NHRS). It is a female specimen with Schönherr's label "Rh. acutipennis/ Say./ Mexico. Say."

## Cryptorhynchus retentus Say, 1832c: 27

Modern Name. Conotrachelus retentus (Say).

*Origin of Specific Name.* Proposed by Say.

Type Locality. Mississippi [stated in description and Ref. 15].

Exchange of Specimens. Say sent Schönherr one specimen as "\*39 retentus, n. (Mississippi) near obtentus Herbst" (Ref.

15), whereupon Schönherr replied, "39. retensus [sic] Say. — Anthonomus id<sup>m</sup>." (Ref. 19).

Interpretations. The name is being used for the black walnut curculio in the sense of Brooks (1922: 7). Schoof (1942: 62) distinguished this species from morphologically similar ones and designated a neotype from Nashville, Tennessee.

Extant Types. The holotype is in drawer 142 of the Schönherr Collection (NHRS), with Schönherr's label "Rh: retensus [sic]/Say./ Mississippi. Say." The neotype designated by Schoof (1942) is set aside under ICNZ Article 75.8.

Notes. Boheman (in Schönherr, 1837) and Gemminger and Harold (1871) used an incorrect subsequent spelling (i.e., retensus), which derived from Schönherr's misreading of the name in Ref. 15.

#### Cryptorhynchus palmacollis Say, 1832c: 27

Modern Name. Rhyssomatus palmicollis (Say, 1832b).

Notes. This is an objective junior synonym of *Tylomus lineaticollis* var. palmicollis Say, 1832b: 16 (see there).

## Cryptorhynchus cribricollis Say, 1832c: 28

Modern Name. Pheloconus cribricollis (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Mississippi [stated in description, Ref. 15, and on Schönherr's label].

Exchange of Specimens. Say sent Schönherr one specimen as "\*81 cribricollis, n. Mississippi" (Ref. 15), whereupon Schönherr replied, "81. cribricollis Say. — Cryptorhynchus id"." (Ref. 19).

Interpretations. Schoof (1942: 116) wrote in his revision that *C. cribricollis* "has not been the source of much confusion." He designated a neotype from Urbana, Illinois, in the sense that had prevailed since LeConte and Horn (1876: 233).

Extant Types. The holotype is in drawer 142 of the Schönherr Collection (NHRS), with Schönherr's label "cribricollis/ Say./ Mississippi. Say." The neotype designated by Schoof (1942) is set aside under ICZN Article 75.8.

#### Cryptorhynchus obliquus Say, 1832c: 28

Modern Name. Cryptorhynchus obliquus Say; **revised name**.

Origin of Specific Name. Proposed by Say.

Type Locality. New Orleans [stated in description, Ref. 15, and on Schönherr's label].

Exchange of Specimens. Say sent Sehönherr one specimen as "\*107 obliquus, n. New Orleans, allied to parochus Herbst?" (Ref. 15), whereupon Sehönherr replied, "107. obliquus Say. — Cryptorhynch: umbrosus Dej." (Ref. 19).

Interpretations. Boheman (in Schönherr, 1837: 116) described C. umbrosus with C. obliquus included as a synonym. Most subsequent authors maintained C. umbrosus in synonymy with C. obliquus, whereas some, e.g., Sehönherr (1844: 331) and Hustache (1936: 233), treated C. umbrosus as a valid name. LeConte (in LeConte and Horn, 1876: 252) believed that C. obliquus should be the valid name for Dejean's unavailable C. fuscatus and that C. umbrosus should be the valid name for C. obliquus of authors. However, because Boheman (in Schönherr, 1837) had treated the two names as synonyms, he made no ehanges and described the putative unnamed species as Cryptorhynchus fuscatus LeConte, 1876. Fiedler (1941: 70) transferred C. obliquus to Eubulus Kirsch, 1869, and Anderson (2008a: 173) returned it back to Cryptorhynchus Illiger, 1807; C. umbrosus remained in synonymy.

Extant Types. The holotype is in drawer 135 of the Sehönherr Collection (NHRS) under Cryptorhynchus umbrosus. It is labeled "Lousiana./ Say." and "Cryptorhyn-

chus/ fuscatus/ det. R. Anderson 2007." Anderson (2008a: 173) designated a neotype from the LeConte Collection (MCZ).

*Notes.* The interpretation offered by LeConte (in LeConte and Horn, 1876) turned out to be correct; the specimen Say had sent to Schönherr is indeed C. fuscatus. The second specimen in the type series of C. umbrosus Boheman, 1837, is the one submitted by Dejean; it represents a different species, i.e., C. obliquus of authors [not Say]. Because of the asterisk on Say's list, the neotype designated by Anderson (2008a) is to be set aside under ICZN Article 75.8, and Say's specimen in drawer 135 must be regarded as the holotype of C. obliquus Say, 1832 (= C. fuscatus LeConte, 1876; **new synonym**). I select here Dejean's specimen in drawer 135 as the leetotype for C. umbrosus Boheman, 1837 (resurrected name), which is now the valid name for *C. obliquus* of authors.

### Cryptorhynchus ferratus Say, 1832c: 28

Modern Name. Apteromechus ferratus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Louisiana [stated in description]; New Orleans [Ref. 15 and on Schönherr's label; see notes below].

Exchange of Specimens. Say sent Sehönherr one specimen as "\*125 ferratus, n. New Orleans (Mr. Ismar)" (Ref. 15), whereupon Sehönherr replied, "125. ferratus Say. — Cryptorhynehus id"." (Ref. 19).

Interpretations. The name is being used in the sense of LeConte (in LeConte and Horn, 1876: 256). Champion (1906: 620) transferred it to Apteromechus Faust, 1896, apparently based on a misidentified specimen from Brownsville, Texas, submitted by Wickham.

Extant Types. The holotype is in drawer 135 of the Schönherr Collection (NHRS), with Schönherr's label "ferratus Say/ N: Orleans./ Say."

Notes. Say's comment on his retained list indicates that the specimen was collected by Frédéric Auguste Ismar in mid December 1829 on his way from Mexico to New Harmony (Ref. 13). Maclure had instructed Ismar to collect specimens for Say and Lesueur during the trip (Warren, 2009: 251). The weevils were mailed to Schönherr approximately 2 months after Ismar's arrival in New Harmony. Say obviously had drafted the description during the interim time.

#### Bagous mamillatus Say, 1832c: 28

Modern Name. Bagous mamillatus Say. Origin of Specific Name. Proposed by Say.

Type Locality. Missouri [stated in description, Ref. 15, and on Schönherr's label].

Exchange of Specimens. Say sent Schönherr one specimen as "\*46 mammillatus [sic] n. Missouri" (Ref. 15), whereupon Schönherr replied, "46. mammillatus Say. — Bagous id"." (Ref. 19).

Interpretations. LeConte (in LeConte and Horn, 1876: 184) applied the name to one of 13 North American nominal species for which he provided a dichotomous key. Tanner (1943: 16) identified *B. mamillatus* among a total of 29 nominal species by matching the original description with available specimens from near the type region. His and LeConte's identifications disagreed, but it appears as if Tanner did not examine LeConte's *B. mamillatus* specimen(s).

Extant Types. The holotype (asterisk on Say's list) is in drawer 143 of the Schönherr Collection (NHRS), with Schönherr's label "Mammillatus/ Say./ e Missuri. Say." Tanner (1943) designated a neotype from Arkadelphia, Arkansas, which I could not find in the supposed repository; his designation is set aside under ICZN Article 75.8.

Notes. The original spelling of the name was "mamillatus," which is correct Latin. The misspelling "mammillatus" was intro-

duced by Say himself in his shipment to Schönherr (Ref. 15) and, apparently independently, again by LeConte and Horn (1876). The incorrect spelling is not in prevailing usage.

#### Bagous simplex Say, 1832c: 29

Modern Name. Lissorhoptrus simplex (Say).

*Origin of Specific Name.* Proposed by Say.

Type Locality. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "103 simplex, n." and another one with the note "120 olivaceus, n." (Ref. 15), whereupon Schönherr replied, "103. simplex Say. — Bagous egenus Dej." and "120. olivaceus. Say. — Bagous egenus Dej." (Ref. 19).

Interpretations. When Say learned that his B. simplex Say ms and B. olivaceus Say ms agreed with B. egenus Dejean ms (Ref. 19), he described the species as B. simplex with the comment "Schoenherr informs me that Dejean has given the name of egenus, to this species" (Say, 1832c: 29). LeConte (in LeConte and Horn, 1876: 183) transferred B. simplex and Notiophilus apiculatus Gyllenhaal, 1835, to Lissorhoptrus LeConte, 1876. In the subsequent literature, the name was applied to several species, among them the rice water weevil (e.g., Tucker, 1912: 1). Kuschel (1952: 49) recognized that LeConte had misidentified N. apiculatus; that L. simplex (Say) is the valid name for *B. egenus* Gyllenhaal, 1836, and L. apiculatus in LeConte's sense; and that the rice water weevil is an entirely different species, which he named L. oryzophilus Kuschel, 1952. However, the type material of B. simplex could not be located, and after consultation with I. Bequaert, Kuschel (1952) relied on the synonymy of B. simplex and B. egenus proposed in Schönherr (1836: 549). O'Brien and Haseeb (2014: 178) corroborated Kuschel's taxonomy and nomenclature in their recent revision.

Extant Types. The erased asterisk on Say's list indicates that there were at least two specimens. In drawer 116 of the Schönherr Collection (NHRS) only the specimen from Dejean occurs under B. egenus. Right underneath is one N. apiculatus Gyllenhaal, which is a species of Onychylis LeConte, 1876, originally received from Say as "\*47 apiculatus, n." and to which Schönherr referred to as "72. apiculatus Say. — Gastrocerus id<sup>m</sup>." (Ref. 19). I was unable to locate the two specimens of "simplex" and "olivaceus." Because "apiculatus" was a separate item on Say's list, I doubt that the N. apiculatus in drawer 116 is a mislabeled or otherwise confused B. simplex, as one may speculate from LeConte's interpretation. It is possible that Schönherr returned or exchanged these two specimens.

### Bagous aereus Say, 1832c: 29

Modern Name. Tyloderma aereum (Say); revised name.

Origin of Specific Name. Analcis aereus; Dejean (Ref. 19).

*Type Locality*. United States [stated in description].

Exchange of Specimens. Say sent Schönherr one specimen as "\*80 semi-punctatus, n." (Ref. 15), whereupon Schönherr replied, "80. semipunctatus Say. — Analcis aereus nob. Bagous id. Dej." (Ref. 19). Say added on his retained list the note "aereus Dej." and provided the history of the name immediately behind the description (Say, 1832c).

Interpretations. The early literature about this species is unreliable. Wibmer (1981: 62), in his revision of the North American species of *Tyloderma* Say, 1832, found that several species had been, or potentially could be, mixed up with *T. aereum*. He interpreted the name based on a series of six specimens obtained from

the Institut Royal des Sciences Naturelles de Belgique and formerly owned by Dejean, who had proposed the name in litteris. The series contained two species. Wibmer (1981: 55) described one of them as *T. capitale* and applied Say's name to the other.

Extant Types. The holotype (asterisk on Say's list) is in drawer 138 of the Schönherr Collection (NIIRS), with Schönherr's label "Semipuncta/ tus. Say./ Amer. bor./ Say." The neotype designated by Wibmer (1981: 63) from the C. W. O'Brien Collection is deposited in the Smithsonian National Museum of Natural History.

Notes. Under Article 75.8, I set aside the neotype designation by Wibmer (1981) and recognize the above-cited NHRS specimen as the holotype. Bagous aereus Say is a senior subjective synonym of Tyloderma capitaloides Wibmer, 1981 (new synonym). Tyloderma wibmeri new species is proposed here for T. aereum sensu Wibmer (1981) [for a description see p. 63 therein], with the type specimen being Wibmer's male neotype for B. aereus from Kolb Pond, Indiana.

## Tylodes (Acalles) clavatus Say, 1832c: 29

Modern Name. Acalles clavatus (Say).

Origin of Specific Name. Proposed by Say.

Type Locality. Florida [stated in description and on Schönherr's label].

Exchange of Specimens. Schönherr (Ref. 19) replied to Say, "127. clavatus Say — Tylodes (Acalles) id<sup>m</sup>." However, Say's retained list ends with item 125 (i.e., with *C. ferratus* collected by Ismar just 2 months before shipment) followed by two unnamed add-ons: A and B (Ref. 15).

Interpretations. LeConte and Horn (1876: 243) and Blatchley and Leng (1916: 501) each provided a redescription without explaining why they believed that this is the species described by Say. Anderson (1993: 206) listed A. clavatus as one of 13 nominal species of Acalles Schönherr, 1825, found in

or reported from Florida, six of them being undescribed.

Extant Types. One syntype is in drawer 140 of the Schönherr Collection (NHRS), with Schönherr's label "C. clavatus/ Say/ Florida, Say."

#### Ceutorhynchus curtus Say, 1832c: 29

Modern Name. Auleutes curtus (Say); **new combination**.

Origin of Specific Name. Proposed by Say.

Type Locality. United States [stated in description], Mississippi [stated on Schönherr's label].

Exchange of Specimens. Say sent Schönherr two specimens by this name, one with the information "\*82 curtus, n." and the other with "\*108 curtus, n. Missouri" (Ref. 15). Schönherr replied, "82. curtus Say. — Ceutorhynchus id"." and "108. curtus Say. — Ceutorhynchus rubidus nob." (Ref. 19).

Interpretations. Gyllenhaal (in Schönherr, 1837: 287) matched Say's description of C. curtus with species 82 and transferred the name to Coeliodes Schönherr, 1837; he newly described Say's 108 as Ceutorhynchus rubidus Gyllenhaal, 1837. LeConte (in LeConte and Horn, 1876: 270) misused the name Coeliodes curtus for a widespread North American species described as Ceutorhynchus subulirostris Gyllenhaal, 1837. Dietz (1896: 393) transferred C. curtus in the sense of LeConte [with Gyllenhaal as the author] to Acanthoscelis Dietz, 1896 [=Acanthoscelidius Hustache, 1930; not Dejean, 1825], and noted on page 398 that Gyllenhaal's description seems to apply to Acanthoscelis acephalus (Say). Moreover, Dietz (1896: 398) considered C. subulirostris Gyllenhaal, 1837 [spelled sabulirostris], as the female of A. acephalus. The identity of C. rubidus has remained unknown altogether.

Extant Types. In the likely case that *C. curtus* Say is identical with species 82, then its holotype (asterisk on Say's list) is in drawer 138 of the Schönherr Collection (NHRS), with Schönherr's label "Rh: curtus Say/ Mississippi./ Say."

Notes. The asterisks on Say's list indicate that the two specimens sent to Schönherr were the only ones he had. Species 82 belongs to Auleutes Dietz, 1896 (possibly A. ater Dietz, 1896), while species 108 is not in drawer 35 where it should be according to the NHRS species locator. Details of the original description of *C. curtus* (dark color, lateral denticles on pronotum) agree with species 82, thus supporting the interpretations by Gyllenhaal and Schönherr. There is a noteworthy discrepancy between the localities cited by Say and Gyllenhaal. Say's list stated Missouri for one of the two specimens, Gyllenhaal (in Schönherr, 1837) gave Mississippi for both. The original description of *C. curtus* said, "Inhab. U. S."

#### Cleogonus sedentarius Say, 1832c: 30

Modern Name. Pseudomus sedentarius (Say).

*Origin of Specific Name*. Proposed by Say.

Type Locality. Florida [stated in description, Ref. 15, and on Schönherr's label].

Exchange of Specimens. Say sent Schönherr one specimen as "\*75 sedentarius, n. Florida" (Ref. 15), whereupon Schönherr replied, "75. sedentarius Say. — Cleogonus id"." (Ref. 19).

Interpretations. Boheman (in Schönherr, 1837: 267) transferred Say's name to Pseudomus Schönherr, 1837, and since then it has been applied to one of the two (and only Floridian) Pseudomus species present in the continental United States. LeConte (in LeConte and Horn, 1876: 247) stated that he does not know the species.

Extant Types. The holotype (asterisk on Say's list) is in drawer 138 of the Schönherr

Collection (NHRS), with Schönherr's label "sedentarius/ Say./ Florida. Say."

### Cossonus multiforus Say, 1832c: 30

Modern Name. Cossonus multiforus Say.
Origin of Specific Name. Proposed by Say.

Type Locality. Mexico [stated in description]; probably vicinity of Mexico City (Barber, 1928).

Exchange of Specimens. Schönherr (Ref. 19) replied to Say, "126. multiforus. Say — Cossonus id"." However, Say's retained list ends with item 125 (i.e., with *C. ferratus* collected by Ismar just 2 months before shipping) followed by two unnamed addons, A and B, but there is no multiforus (Ref. 15).

Interpretations. Taschenberg (1869: 237) cataloged four Carolina specimens as being present in the Germar Collection. Champion (1909b: 47) did not recognize the species and reported Schönherr's specimen as being lost. Cossonus multiforus is a nomen dubium.

Extant Types. Apparently lost. In drawer 46 of the Schönherr Collection (NHRS) is an empty pin with the label "403/58."

#### Rhyncholus [sic] latinasus Say, 1832c: 30

Modern Name. Cossonus corticola Say.

Origin of Specific Name. Proposed by Say.

Type Locality. Florida [stated in description, Ref. 15, and on Schönherr's label].

Exchange of Specimens. Say sent Schönherr one specimen as "\*99 latinasus, n. Florida" (Ref. 15), whereupon Schönherr replied, "99. latinasus Say. — Rhyncolus id"." (Ref. 19).

Interpretations. LeConte and Horn (1876: 340), deceived by misidentified specimens received from Chevrolat, considered R. latinasus as the valid name for Cossonus pinguis Horn, 1873 (action by Horn), and transferred the name to Caulophilus Wollaston, 1854 (action by LeConte).

In the subsequent North American literature, Caulophilus latinasus generally was used in their sense for a species known as the broad-nosed grain weevil. Kuschel (1962: 3) recognized that the descriptions of R. latinasus by Say (1832c) and Boheman (in Schönherr, 1838: 1068) deviate from C. latinasus in the sense of LeConte and Horn (1876), the latter turning out to be Caulophilus oryzae (Gyllenhaal, 1838). He selected Schönherr's authentic Say specimen as the lectotype for R. latinasus and considered it a subjective junior synonym of Cossonus corticola Say, 1832.

Extant Types. The holotype (asterisk on Say's list) is in drawer 47 of the Schönherr Collection (NHRS), with the labels "C. latinasus/ Say./ Florida. Say.," "444/ 60," and "Rhyncolus/ latinasus/ Say Lectotype/ Kuschel det. 1960."

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